

STATE OF MINNESOTA

DISTRICT COURT

COUNTY OF HENNEPIN

FOURTH JUDICIAL DISTRICT
CASE TYPE: 14. Other Civil
(declaratory judgment and MERA)

State of Minnesota by Smart Growth
Minneapolis, LLC, Audubon Chapter of
Minneapolis and Minnesota Citizens for the
Protection of Migratory Birds,

Case File No. _____
The Honorable _____

Plaintiffs,

**VERIFIED COMPLAINT FOR
DECLARATORY AND INJUNCTIVE
RELIEF UNDER MERA**

v.

City of Minneapolis,

Defendant.

Plaintiffs State of Minnesota by Smart Growth Minneapolis, LLC (Smart Growth),
Audubon Chapter of Minneapolis (Audubon) and Minnesota Citizens for the Protection of
Migratory Birds (MCPMB) (Plaintiffs) for their complaint against Defendant City of
Minneapolis (City) allege as follows:

I. CASE OVERVIEW

1. On Friday, December 7, 2018 at 9:30 a.m., City, through its City Council, is
scheduled to approve of its "Minneapolis 2040 Comprehensive Plan" (2040 Plan) per its Minn.
Stat. § 473.864, subd. 2-required "once every ten years" comprehensive plan "review." See
<https://minneapolis2040.com/pdf/>.¹

¹ Per Minn. Stat. § 473.864, subd. 1, City is required (*i.e.*, "shall") by December 31, 2018 to
"review and, if necessary, amend its entire comprehensive plan." But, per its § 473.864, subd. 2
authority, the Metropolitan Council has given City until "**December 21, 2018**" to "make a
request of up to 6 additional months to submit their plan, or through June 30, 2019."
<https://metro council.org/Handbook/Review-Process/Comprehensive-Plan-Updates.aspx>. Indeed,
on Wednesday, November 28, 2018, Plaintiffs, to no avail, reminded Mayor Jacob Frey that
"Minneapolis can certainly seek an extension from Met Council, as St. Paul did." Ex. 5.

2. With nearly 150,000 "anticipated new [housing] units" (Ex. 1 at 6) and densification (or "upzoning") increases for its existing residential areas of "43%," "149%," "210%," "326%" and "435%" (*id.* at 11-12), the 2040 Plan is the "furthest reaching" upzoning proposal "from a U.S. municipality" (Ex. 2 at 1-2).

3. Not surprisingly, then, Plaintiffs have, through their highly-credentialed environmental consultant Sunde Engineering (Sunde) (Ex. 1), easily satisfied their "prima facie showing" under Minn. Stat. ch. 116B (Minnesota Environmental Right Act (MERA)) that the 2040 Plan "is likely to cause the pollution, impairment, or destruction of the air, water, land or other natural resources located within the state." Minn. Stat. § 116B.04.

4. Yet, even though an exhaustive environmental review is its only realistic way to satisfy its MERA-required "rebut[tal]" or "affirmative defense" to Plaintiffs' "prima facie showing" (*id.*), City has declined Plaintiffs' repeated requests that it, like Seattle recently did with its own (albeit scaled-down) upzoning proposal entitled "Seattle 2035 Comprehensive Plan,"² voluntarily do so (Exhs. 3-5).

5. Thus Plaintiffs seek, as compelled under MERA, to (1) immediately enjoin City from approving of its 2040 Plan and (2) order the continuation of the injunction unless and until City satisfies its requisite "rebut[tal]" or "affirmative defense" to Plaintiffs' "prima facie showing," presumably through its voluntary environmental review.

6. And, because City has continued to materially change its 2040 Plan long after its November 14, 2018 close of public input, Plaintiffs could not have commenced its action any sooner. For example, at the Wednesday, November 28, 2018 meeting of its City Council

² Citywide Implementation of Mandatory Housing Affordability (MHA) Final Environmental Impact Statement, available at https://www.seattle.gov/Documents/Departments/HALA/Policy/MHA_FEIS/0_CoverFactSheet_MHA_FEIS_2017.pdf.

Committee of Whole, City Council approved of Councilmember Bender's 12 sets of proposed changes affecting 4,994 residences,³ as well as several other material changes thereto such as the head-scratching increased residential densification in the flood zone.⁴ City has, moreover, the opportunity to make further changes to the 2040 Plan at the City Council Committee of the Whole meeting at 1:30 p.m. on Wednesday, December 5, 2018 and at its City Council meeting at 9:30 a.m. on Friday, December 7, 2018, though the reasonable expectation is that any such last-minute changes will be modest.

II. MERA'S REQUIREMENTS

A. OVERVIEW

7. MERA empowers almost any citizen, group or corporation in Minnesota to bring a lawsuit "for declaratory or equitable relief in the name of the state of Minnesota against any person, for the protection of air, water, land, or other natural resources located within the state, whether publicly or privately owned, from pollution, impairment, or destruction." Minn. Stat. § 116B.03, subd. 1 (emphasis added).

8. And "pollution, impairment, or destruction" under § 116B.03, subd. 1 is broadly defined under § 116B.02, subd. 5 as inclusive of "any conduct which . . . is likely to materially adversely affect the environment."

B. STANDING REQUIREMENT

9. A MERA action can be commenced by "[a]ny person residing within the state . . . or any partnership, corporation, association, organization or other entity having shareholders,

³Available at <https://lims.minneapolismn.gov/Download/File/1877/Mpls%202040%20-%20Council%20President%20Map%20Amendments.pdf>.

⁴ <https://www.dropbox.com/s/bp4vv10jwzmjujl/com.apple.AVKit.Share-EBBC8496-719F-4163-B7D4-6FA02A535B1A.mov?dl=0>.

members, partners or employees residing within the state." Minn. Stat. § 116B.03, subd. 1 (emphasis added).

10. And "person" is broadly defined under MERA as follows:

"Person" means any natural person, any state, municipality or other governmental or political subdivision or other public agency or instrumentality, any public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agent, or other legal representative of any of the foregoing, and any other entity, except a family farm, a family farm corporation or a bona fide farmer corporation.

Minn. Stat. § 116B.02, subd. 2.

C. SHIFTING BURDENS OF PROOF

1. The plaintiff's two requirements for its requisite "prima facie showing" when there is *not* an alleged violation of "any environmental quality standard"

11. When there is not an alleged violation of "any environmental quality standard," MERA requires that "the plaintiff shall have made a prima facie showing that the conduct of the defendant . . . is likely to cause the pollution, impairment, or destruction of the air, water, land or other natural resources located within the state." Minn. Stat. § 116B.04 (emphasis added).

12. "'Shall' is mandatory." Minn. Stat. § 645.44, subd. 16.

13. The plaintiff's "prima facie showing" has, more specifically, two requirements. *State by Archabal v. County of Hennepin*, 495 N.W.2d 416, 421 (Minn. 1993).

14. "First, the plaintiff must show the existence of a protectable natural resource." *Id.*

15. Second, the plaintiff must show the "pollution, impairment or destruction" — as defined in Minn. Stat. § 116B.02, subd. 5 above — of that "natural resource" which is likely to be caused by the "conduct at issue." *Id.*

a. REQUIREMENT NO. 1: "A protectable natural resource"

16. "Natural resources" are broadly defined under MERA as follows:

"Natural resources" shall include, but not be limited to, all [(1)] mineral, [(2)] animal, [(3)] botanical, [(4)] air, [(5)] water, [(6)] land, [(7)] timber, [(8)] soil, [(9)] quietude, [(10)] recreational and [(11)] historical resources. [(12)] Scenic and [(13)] esthetic resources shall also be considered natural resources when owned by any governmental unit or agency.

Minn. Stat. § 116B.02, subd. 4 (emphasis and bracketed information added).

17. "'Shall' is mandatory." Minn. Stat. § 645.44, subd. 16.

18. Consistent with its broad definition, "natural resources" has been broadly defined by the courts. *State by Archabal*, 495 N.W.2d at 418 (Armory protected natural resource); *State by Powderly v. Erickson*, 285 N.W.2d 84, 88 (Minn. 1979) (historical row houses protected natural resource); *Minnesota Public Interest Research Group v. White Bear Rod & Gun Club*, 257 N.W.2d 762, 770 (Minn. 1977) (lakes and wetlands are "natural resources"); *State by Fort Snelling State Park Ass'n v. Minneapolis Park & Recreation Bd.*, 673 N.W.2d 169, 174-75 (Minn. App. 2003) (historical polo grounds on Fort Snelling site protected natural resource); *State ex rel. Wacouta Twp. v. Brunkow Hardwood Corp.*, 510 N.W.2d 27, 29 (Minn. App. 1993) (holding "bald eagles and the trees in which they roost are a natural resource within the scope of MERA" and noting that "[i]n general, MERA's definition of natural resources is presumed to be broad"); *State by Drabik v. Martz*, 451 N.W.2d 893, 896-97 (Minn. App. 1990) (scenic and esthetic resources impacted by view of proposed radio tower protected natural resource).

b. REQUIREMENT NO. 2: "[P]ollution, impairment, or destruction"

19. Consistent with the above-stated broad definition of "pollution, impairment, or destruction" under Minn. Stat. § 116B.02, subd. 5 (*see above* ¶ 8), the "materially adverse effects [on] . . . the environment" has also been broadly construed. *Citizens for a Safe Grant v. Lone Oak Sportsmen's Club, Inc.*, 624 N.W.2d 796, 805 (Minn. App. 2001) (identifying the broad nature

of "materially adverse affects" provision of MERA by "recognizing that there are instances when environmental regulations may not keep up with changing conditions"); *see State by Drabik*, 451 N.W.2d at 897 (finding MERA "broad enough" to prevent materially-adverse effects on scenic and aesthetic resources from installation of radio tower on private property); *Minnesota Public Interest Research Group*, 257 N.W.2d at 781 (describing MERA, in the context of materially-adverse effects, as "a far-reaching legislative enactment").

20. Courts will consider the following five factors in determining whether the "conduct at issue" "is likely to materially adversely affect the environment":

- (1) The quality and severity of any adverse effects of the proposed action on the natural resource affected;
- (2) Whether the natural resources affected are rare, unique, endangered, or have historical significance;
- (3) Whether the proposed action will have long-term adverse effects on natural resources, including whether the affected resources are easily replaceable (for example, by replanting trees or restocking fish);
- (4) Whether the proposed action will have significant consequential effects on other natural resources (for example, whether wildlife will be lost if its habitat is impaired or destroyed);
- (5) Whether the affected natural resources are significantly increasing or decreasing in number, considering the direct and consequential impact of the proposed action.

Citizens for a Safe Grant, 624 N.W.2d at 805-06 (quoting *White v. Minnesota Dep't of Natural Resources*, 567 N.W.2d 724, 738 (Minn. App. 1997)).

2. **The defendant's requisite "rebut[tal]" or "affirmative defense" to such a "prima facie showing"**

21. Whenever the MERA plaintiff has made such a "prima facie showing," the defendant has to either (1) "rebut the prima facie showing by the submission of evidence to the contrary" or (2) "show, by way of an affirmative defense, that [(a)] there is no feasible and

prudent alternative and [(b)] the conduct at issue is consistent with and reasonably required for promotion of the public health, safety, and welfare in light of the state's paramount concern for the protection of its air, water, land and other natural resources from pollution, impairment, or destruction," though "[e]conomic considerations alone shall not constitute a defense hereunder." Minn. Stat. § 116B.04 (emphasis and bracketed information added).

a. **"REBUT[TAL]": "[T]he submission of evidence to the contrary"**

22. The defendant's MERA-required "rebut[tal]" to the plaintiff's "prima facie showing" requires its "submission of evidence to the contrary." *Id.* (emphasis added).

23. The defendant's "evidence" is required to be specific, substantive and verifiable, not vague, conclusory and speculative. *See, e.g., Minnesota Public Interest Research Group*, 257 N.W.2d at 781 (conclusory opinion testimony insufficient to overcome presumption when "defendant made no attempt to show that the operation of the Gun Club could be conducted in such a way . . . that it would not materially adversely affect the natural resources of the area").

b. **"AFFIRMATIVE DEFENSE": "[S]how . . . that there is [(1)] no feasible and prudent alternative and [(2)] the conduct at issue is consistent with and reasonably required for promotion of the public health, safety, and welfare in light of the state's paramount concern for the protection of its air, water, land and other natural resources from pollution, impairment, or destruction"**

24. "[A]nd" is a conjunctive. *Moorhead Econ. Dev. Auth. v. Anda*, 789 N.W.2d 860, 874 n.8 (Minn. 2010) ("We conclude that the word 'and' is conjunctive").

25. As such, the defendant's MERA-required "affirmative defense" to the plaintiff's "prima facie showing" requires its proof of both prongs thereto—*i.e.*, (1) there is "no feasible and prudent alternative" to "the conduct at issue" and (2) "the conduct at issue" is "consistent with and required for promotion of the public health, safety, and welfare in light of the state's

paramount concern for the protection of its air, water, land and other natural resources from pollution, impairment, or destruction."

26. Critically, other than through (1) the state's highest level of environmental review (*i.e.*, an Environmental Impact Statement (EIS) under Minn. R. 4410.2000-.3200) or (2) the equivalent thereto, (*i.e.*, "substitute methods of environmental review" under Minn. R. 4410.3600-.4000, including an Alternative Urban Areawide Review (AUAR) under Minn. R. 4410.3610), there is virtually no way for the defendant to satisfy both of these required prongs for "conduct at issue" such as the 2040 Plan's massive, city-wide upzoning proposal.

27. As to the appropriateness of an EIS to satisfy the first prong of the MERA-required "affirmative defense" for such "conduct at issue" (*i.e.*, "no feasible and prudent alternative"), the Minnesota Environmental Quality Board (EQB) notes that "[o]ne of the main purposes of an EIS is to examine potential environmental impacts of project alternatives." Minnesota Environmental Quality Board, *Guide to Minnesota Environmental Review* (EQB Guide) at 12 (available at <https://www.eqb.state.mn.us/sites/default/files/documents/rulguid3.pdf>) (emphasis added).

28. EQB explained, as follows, the scope of the EIS's required "alternatives" analysis:

In 1997 the Environmental Quality Board amended the rules to provide more guidance to Responsible Governmental Units for selecting an appropriate range of alternatives.

■ The revised rule requires that an EIS must include the **no-build alternative and at least one alternative of each of the following types** or provide a concise explanation of why no alternative is included in the EIS:

- Sites
- Technologies
- Modified designs or layouts
- Modified scale or magnitude and
- An alternative incorporating reasonable mitigation measures identified through comments on the scope or the draft EIS

Alternatives may be excluded only if they meet any of the following criteria:

- Underlying need for or purpose of the project is not met.
- Significant environmental benefit over the proposed project is not provided.
- Another alternative is likely to be similar in environmental benefits but will have lesser socioeconomic impacts.

The RGU should keep a written record of alternatives examined and its rationale for any exclusions, providing a summary in the EIS scoping document and complete documentation in the EIS. It is not necessary for the EIS to identify any alternative as preferred.

* * *

For public projects, the RGU should be careful not to eliminate alternatives from the EIS based simply on the culmination of a prior planning process.

The RGU must take a hard look at the basis for prior decisions to make sure that environmentally superior alternatives were not eliminated without sufficient justification based on the rule's three criteria. Eliminated alternatives should be discussed in the EIS and noted in the scoping decision document. Prior decisions to eliminate options may need to be revisited in the EIS if insufficient consideration was given to environmental impacts. The next chapter describes how the RGU can use the "tiered" EIS concept, added to the rules in 1997, to efficiently incorporate environmental review into complicated public decision-making processes and to help avoid prematurely dismissing alternatives without sufficient justification.

Public project proposers are further cautioned against taking any actions regarding site or route acquisitions or project commitments prior to completing the EIS unless it is clear that such action is not prohibited by part 4410.3100, subpart 2 or other laws.

EQB Guide at 12-13.

29. And, as to the appropriateness of an EIS to satisfy the second prong of the MERA-required "affirmative defense" for such "conduct at issue" (*i.e.*, "consisten[cy] with . . . the public health, safety and welfare"), the EIS is also required to address all significant environmental impacts as "[t]he EIS often serves as a basic public document about a controversial project and its audience expects information about all topics related to the project" (*id.* at 10), including the "mitigation measures identified in the EIS provide decision-makers with a list of possible measures to reduce impacts" (*id.* at 13).

30. Equivalent thereto, there are, as well, "substitute methods of environmental review" under Minn. R. 4410.3600-.4000 (EQB Guide at 15-17), including – most notably – an AUAR under Minn. R. 4410.3600 (EQB Guide at 16-17).

31. An AUAR is, as explained by EQB, tailor-made for where the "conduct at issue" is akin to the 2040 Plan's massive, city-wide upzoning proposal:

The regular environmental review process is best suited for distinct projects with environmental impacts that do not overlap. In 1988 the Environmental Quality Board adopted a process to review incremental impacts accumulating from a series of sequential projects, development typical of the rapidly growing suburbs of the Twin Cities metropolitan area. The Alternative Urban Areawide Review process substitutes for any EAW or EIS required for specific qualifying projects, provided they comply with the review assumptions and mitigation measures.

The review's key feature is that its subject is a development scenario or several scenarios for an entire geographical area rather than a specific project. Development scenarios are established by the local unit based upon the comprehensive plan, zoning ordinances, developers' plans and other relevant information. More than one scenario can be reviewed, providing at least one is consistent with the adopted comprehensive plan. A maximum development, "worst case" scenario is usually included. Development scenarios chosen by the local unit serve as the project description for the environmental impacts analysis. Specific projects ready for review within the area can be included, however, the review can also be done before any specific projects are proposed.

* * *

Types of development projects that can be reviewed through the Alternative Urban Areawide Review process were clarified in the 1997 rule amendments. Specifically, an AUAR can now substitute for review of: residential development, commercial development, warehousing, light industrial development and infrastructure associated with any developments such as roadways, water, sewer and stormwater systems. Light industrial development is defined as the assembly of products from components that are produced off-site. Development with characteristics that meet thresholds of any industrial mandatory EAW or EIS categories (part 4410.4300, subparts 2 to 13, 15 to 18 or 24; part 4410.4400, subparts 2 to 10, 12, 13 or 25) are not eligible for AUAR.

EQB Guide at 15 (emphasis added).

32. EQB explains, in fact, the following "benefits of the AUAR process":

Benefits of the AUAR process. The process offers several significant advantages to developers, city governments, reviewing agencies and to the environment. It is an excellent tool for review of cumulative impacts of multiple projects in a given area. AUAR enables city planners to better integrate environmental review into their comprehensive planning process. A single review process can address both public infrastructure construction scheduled in the near future as well as the ensuing residential and commercial development slated for later years. By examining multiple development scenarios through the AUAR process, planners are able to evaluate how much development can be accommodated in an area without significant environmental impacts. Moving review to an earlier planning stage helps anticipate and correct potential problems while project plans are still flexible.

Id. at 16 (underlining added).

D. AVAILABLE REMEDIES

33. Where (1) the plaintiff has satisfied its MERA-required "prima facie showing" but (2) the defendant has not satisfied its MERA-required "rebut[tal]" or "affirmative defense" to such a "prima facie showing," this Court is broadly authorized under MERA to issue any of the following "relief":

The court may grant [(1)] declaratory relief, [(2)] temporary and permanent equitable relief, or may [(3)] impose such conditions upon a party as are necessary or appropriate to protect the air, water, land or other natural resources located within the state from pollution, impairment, or destruction.

Minn. Stat. § 116B.07 (emphasis and bracketed information added).

34. In such a situation, injunctive relief is appropriate to protect against the unmitigated material adverse environmental impact. *See, e.g., State ex rel. Wacouta Twp.*, 510 N.W.2d at 31 ("The trial court properly concluded that Wacouta Township established a prima facie case and that Pepin Heights did not rebut this case and granted injunctive relief that is supported by the record"); *County of Freeborn v. Bryson*, 243 N.W.2d 316, 320 (Minn. 1976) (where prima facie case is un rebutted, injunctive relief is appropriate).

35. But, "in the absence of unusual or extraordinary factors, the trial court must enjoin environmentally destructive conduct if a feasible and prudent alternative is shown." *County of*

Freeborn, 243 N.W.2d at 321 (emphasis added); *see also State by Archabal*, 495 N.W.2d at 426 (reversing trial court order refusing to enjoin destruction of historical building where defendant failed to establish absence of feasible and prudent alternatives).

III. PLAINTIFFS

36. Plaintiffs are a coalition of "persons" that are concerned not necessarily with the merits of the 2040 Plan itself, but rather with the alarming reality that (1) the 2040 Plan, with its massive, city-wide upzoning, will materially adversely impact the environment but (2) City has refused to identify, let alone address, these material adverse environmental impacts.

37. Smart Growth is "organized and shall be operated primarily to conduct activities related to the common good and general welfare of the Minneapolis community, including through the preservation, beautification and environmentally sustainable development of Minneapolis, through education of the public, advocacy efforts, litigation or otherwise, and to do any and all other acts and things and exercise any and all other rights and powers which may be reasonably necessary, incidental, desirable or expedient in the accomplishment of such purposes." And, consistent with its mission, Smart Growth has submitted to City its concerns with and opposition to the 2040 Plan. Exhs. 3-5.

38. Audubon's mission "is to be a local leader in effective bird conservation, to engage community members in bird related activities, and to support programs that align with this mission." And, consistent with its mission, Audubon has submitted to City its concerns with and opposition to the 2040 Plan. Exhs. 6-8.

39. MCPMB's mission is also "to protect migratory birds and their habitat throughout Minnesota." And, consistent with its mission, MCPMB has, along with Audubon, submitted to City its concerns with and opposition to the 2040 Plan. Ex. 7; <https://www.facebook.com/pg/citizensprotectmigratorybirds/about/>.

IV. THE 2040 PLAN

40. A municipality's comprehensive plan, not its zoning ordinance, controls the land use development within its jurisdictional boundaries. Minn. Stat. § 473.858, subd. 1; *Mendota Golf, LLP v. City of Mendota Heights*, 708 N.W.2d 162, 175 (Minn. 2006) ("comprehensive plan constitutes the primary land use control for cities and supersedes all other municipal regulations when these regulations are in conflict with the plan").

41. And, to the extent its comprehensive plan is in conflict with its zoning ordinance, it is the zoning ordinance that must be amended for consistency with the comprehensive plan, not vice versa. Minn. Stat. § 473.858, subd. 1 ("[i]f the comprehensive plan is in conflict with the zoning ordinance, the zoning ordinance shall be brought into conformance with the plan"); *Mendota Golf, LLP*, 708 N.W.2d at 175 ("the nature of the [trial court] order itself – directing the city to bring its comprehensive plan into conformity with its zoning ordinance – appears to violate [Minn. Stat. § 473.858, subd. 1] because this approach undermines the supremacy of the comprehensive plan via-a-vis the zoning ordinance").

42. Thus, if the 2040 Plan is approved, then it controls land use development within City for at least the next decade. *Id.* Consistent therewith, Sunde's "November, 2018 Environmental Analysis" (Analysis) (Ex. 1 at 15) explains that "[t]he 2040 Plan indicates that the City of Minneapolis will update its Zoning Code and Zoning Map to reflect the guidance of the Future Land Use and Built Form Maps after adoption of the plan. Height, bulk and setback standards will work in concert with and be informed by the maps and policies of the plan."

43. As illustrated by Sunde's Analysis (Ex. 1), it is impossible to overstate the resulting land use changes being proposed by the 2040 Plan. Indeed a recent article on the 2040 Plan was appropriately captioned: "**Can Minneapolis's radical rezoning be a national model?**" Ex. 2 at 1 (underlining added). And the "**radical rezoning**" article begins by boldly

proclaiming that "[c]alling the Minneapolis 2040 plan ambitious is an understatement" (*id.*), adding that "[t]he plan . . . is the furthest-reaching such [upzoning] proposal from a U.S. municipality." *Id.* at 1-2 (underling and bracketed information added).

44. As proof of its caption and initial proclamation, the "**radical rezoning**" article explains, as follows, that "[t]he updated policy would upzone nearly the entire city, which will allow taller buildings with more units to be built in areas that previously only contained single-family homes (at present, more than 75 percent of city residents live in areas that only allow single-family residences or small multifamily housing)." *Id.* at 2 (underlining added). The article further explains:

Minneapolis 2040 believes the solution is simply more: [(1)] more construction, [(2)] more high-rises, and [(3)] more triplexes. The comprehensive plan update would create new zoning categories across the city. In addition to allowing triplexes, the new rules would allow developers in most residential areas to build four stories high. It would also eliminate off-street parking requirements, which add to the cost of a new project without increasing density.

This update didn't come out of nowhere; city planners update it every decade. According to Minneapolis's long-range planning director, Heather Worthington, this year's update just happens to be more ambitious, seeking to tackle big goals, like climate change, housing choice and affordability, and racial equity.

"We know Minneapolis is facing some of the deepest and most challenging disparities in the nation," Worthington said during a recent episode of the *Streets.MN* podcast. "Today's zoning is built on those old redlining maps."

In many ways, it's a market-oriented answer to artificial scarcity: More supply meets demand, brings down housing costs, and allows more workers to live close to jobs and other opportunities.

The updated plan would allow for more construction for the future, while [Mayor Jacob] Frey's plans to invest \$40 million in programs to help those suffering from the impact of high housing costs would help expand the safety net today. Initiatives like Stable Homes, Stable Schools, which would support homeless children and teens in Minneapolis Public Schools; a fund to help upgrade existing affordable housing; a tripling of the \$6.5 million Affordable Housing Trust Fund; and money for tenant legal advocacy would provide immediate assistance as the changes envisioned by Minneapolis 2040 begin to take shape.

Id. at 4-5 (emphasis and bracketed information added).

V. PLAINTIFFS' "PRIMA FACIE SHOWING"

A. GENERALLY STATED

45. So as to remove City's anticipated red herring "defense" to the contrary, Plaintiffs' "prima facie showing" has absolutely nothing to do with the merits of the "heated debate" for and against the 2040 Plan. Ex. 2.

46. Instead, Plaintiffs' "prima facie showing" is, as required under MERA (*i.e.*, Minn. Stat. § 116B.04), exclusively focused on the ineluctable conclusion that, unless it is both (1) environmentally vetted and (2) properly adjusted and planned for (*e.g.*, infrastructure designed) in advance as state law requires to be done with any other massive project (*e.g.*, Hiawatha LRT, Southwest LRT), the 2040 Plan's likely material adverse environmental impacts will be dramatic and unmitigated, as well as unmitigable.

47. This is because, using the legally required assumption of the immediate and full build-out of City per its 2040 Plan, there will be, for example, the potential for and likelihood of each of the following:

- *Dramatic* increase in the amount of impervious surface area, thus resulting in the material increase in the rate and volume of stormwater runoff;
- *Dramatic* increase in the number of residents, thus resulting in the material increase in domestic wastewater generation, potable water usage and parking needs/vehicles/traffic; and
- *Dramatic* loss of the amount of tree coverage/green space, thus resulting in the material decrease in aesthetic livability and bird and other wildlife habitat.

48. And the resulting potential and likely environmental effects will include, among others, the following:

- (1) Threats to the adequacy of existing public infrastructure, including storm and sanitary sewer systems and water supply;
- (2) Threats to traffic congestion;
- (3) Threats to air quality; and
- (4) Threats to aesthetic livability, tree coverage, and bird and wildlife habitat.

B. SPECIFICALLY PROVEN

49. Plaintiffs hired Sunde as undisputedly qualified environmental experts to objectively assess the likelihood for and the extent of 2040 Plan's material adverse environmental impacts. (Ex. 1).

50. And, consistent with the sheer scope and audacity of the 2040 Plan's massive, city-wide upzoning proposal, Sunde's resulting Analysis concluded as follows:

The 2040 Plan establishes a dramatic shift in land use policy with a general city wide increase in permitted density. Proposed changes in land use consistent with the 2040 Plan inherently impact the environment as well as existing infrastructure that was implemented based on entirely different design criteria.

Id. at 1 (emphasis added).

51. In reaching its conclusion, Sunde's Analysis relied upon four different bases.

a. **BASIS NO. 1: "Mandatory EIS category"**

52. Even though the 2040 Plan is "exempt" from involuntary environmental review under Minn. Stat. § 116D's Minnesota Environmental Protection Act (MEPA) (Minn. R. 4410.4600, subp. 26 ("exemption" from involuntary environmental review for the "amendment of comprehensive and other plans, zoning ordinances, or other official controls by local government units")), this "exemption" does not extend to either (1) any other portions of MEPA, including without limitation (a) its "**DECLARATION OF STATE ENVIRONMENTAL POLICY**" under § 116D.02, subd. 1,⁵ (b) its identification of "[s]tate responsibilities" under § 116D.02, subd. 2⁶ and (c) its "[p]rohibition" under § 116D.04, subd. 6,⁷ or (2) MERA.

⁵ Per § 116D.02, subd. 1, the "**STATE ENVIRONMENTAL POLICY**" is as follows:

Policy. The legislature, recognizing the profound impact of human activity on the interrelations of all components of the nature environment, particularly the profound influences of [(1)] population growth [and] [(2)] high density urbanization . . . and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of

53. And, because they have shown their ability to narrowly "exempt" municipal "comprehensive plans" from involuntary environmental review under MEPA (Minn. R. 4410.4600, subp. 26), the lawmakers' failure to likewise "exempt" municipal "comprehensive

human beings, declares that it is the continuing policy of the state government, in corporation with . . . local governments . . . to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which human beings and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of the state's people.

(Underlining and bracketed information added). Indeed, "as a political subdivision of the state, [City] has a greater duty than does a private individual to see that legislative policy is carried out. As a creature of the state deriving its sovereignty from the state, the [city] should play a leadership role in carrying out legislative policy." *County of Freeborn*, 243 N.W.2d at 320 (emphasis and bracketed information added).

⁶ Per § 116D.02, subd. 2, the "[s]tate responsibilities" pointedly include, as follows, the environmental impacts related to land use planning:

In order to carry out the policy set forth in Laws 1973, chapter 412, it is the continuing responsibility of the state government to use all practicable means, consistent with other essential considerations of state policy, to improve and coordinate state plans, functions, programs and resources to the end that the state may:

* * *

(6) develop and implement land use and environmental policies, plans, and standards for the state as a whole and for major regions thereof through a coordinated program of planning and land use control.

⁷ Per § 116D.04, subd. 6, the "[p]rohibition" includes the following:

No state action significantly affecting the quality of the environment shall be allowed, nor shall any permit for natural resources management and development be granted, where such action or permit has caused or is likely to cause pollution, impairment, or destruction of the air, water, land or other natural resources located within the state, so long as there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety, and welfare and the state's paramount concern for the protection of its air, water, land and other natural resources from pollution, impairment, or destruction. Economic considerations alone shall not justify such conduct.

plans" from either (1) the rest of MEPA or (2) MERA is required to be construed as purposeful. *See In re Stadsvold*, 754 N.W.2d 323, 328-29 (Minn. 2008) ("distinctions in language in the same context are presumed to be intentional"); *Seagate Tech., LLC v. W. Digital Corp.*, 854 N.W.2d 750, 759 (Minn. 2014) (same).

54. Accordingly, while the 2040 Plan is "exempt" from involuntary environmental review under MEPA, the 2040 Plan is not "exempt" from the "**STATE ENVIRONMENTAL POLICY**," which is directly at issue with the 2040 Plan because it "recogniz[es] the profound impact of human activity on the interrelations of all components of the nature environment, particularly the profound influences of [(1)] population growth [and] [(2)] high density urbanization." Minn. Stat. § 116D.02, subd. 1 (underlining and bracketed information added).

55. Similarly, the 2040 Plan is not "exempt" from Plaintiffs' "prima facie showing" under MERA, including Plaintiffs' satisfaction of this "showing" by their reference to MEPA's mandatory environmental review "categories." *See* Minn. R. 4410.4300 (38 categories for mandatory environmental assessment worksheet (EAW), which is the state's lowest level of environmental review) and .4400 (28 categories for mandatory EIS, which is the state's highest level of environmental review). This is because these mandatory environmental review categories are, as determined by the EQB (Minn. Stat. § 116D.04, subd. 2a(b)), uses which inherently pose such potential for material adverse environmental impacts that they are subject to mandatory environmental review.⁸

⁸ Necessarily reserved for the types of projects which inherently pose the greatest potential for material adverse environmental impacts, the 28 mandatory EIS categories are (1) "**[n]uclear fuels and nuclear waste**" (Minn. R. 4410.4400, subp. 2), (2) "**[e]lectric generating facilities**" (Minn. R. 4410.4400, subp. 3), (3) "**[p]etroleum refineries**" (Minn. R. 4410.4400, subp. 4), (4) "**[f]uel conversion facilities**" (Minn. R. 4410.4400, subp. 5), (5) "**[t]ransmission lines**" (Minn. R. 4410.4400, subp. 6), (6) "**[u]nderground storage**" (Minn. R. 4410.4400, subp. 7), (7) "**[m]etallic mineral mining and processing**" (Minn. R. 4410.4400, subp. 8), (8) "**[n]onmetallic**

56. And, consistent with the "STATE ENVIRONMENTAL POLICY," which "recogniz[es] the profound impact of human activity on the interrelations of all components of the nature environment, particularly the profound influences of [(1)] population growth [and] [(2)] high density urbanization" (Minn. Stat. § 116D.02, subd. 1 (emphasis and bracketed information added)), Minn. R. 4410.4400, subp. 14 includes the mandatory EIS category for the "residential development . . . for construction of a permanent or potentially permanent residential development of:

* * *

D. 1,000 unattached units or 1,500 attached units in a city within the seven-county Twin Cities metropolitan area that has adopted a comprehensive plan under Minnesota Statutes, section 473.859."

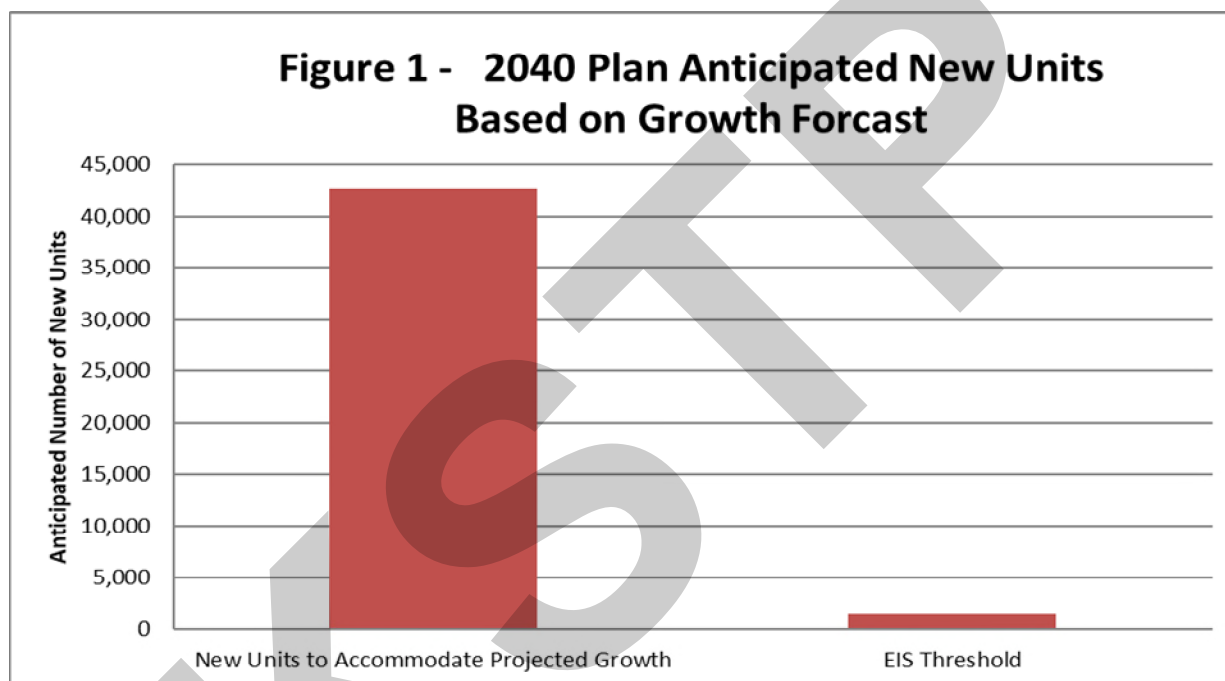
(Emphasis added).

57. This is determinative of Plaintiffs' "prima facie showing" because, whether calculating its "anticipated new units" either (1) "[b]ased on projected growth" in the plan (Ex. 1 at 2-4) or (2) "[b]ased on allowable units per acre" under the plan (*id.* at 4-7), the 2040 Plan's

mineral mining" (Minn. R. 4410.4400, subp. 9), (9) "**[p]aper or pulp processing**" (Minn. R. 4410.4400, subp. 10), (10) "**[i]ndustrial, commercial, and institutional facilities**" (Minn. R. 4410.4400, subp. 11), (11) "**[h]azardous waste**" (Minn. R. 4410.4400, subp. 12), (12) "**[s]olid waste**" (Minn. R. 4410.4400, subp. 13), (13) "**[r]esidential development**" (Minn. R. 4410.4400, subp. 14), (14) "**[r]esidential development in shoreland outside of the seven-county Twin Cities metropolitan area**" (Minn. R. 4410.4400, subp. 14a), (15) "**[a]irport runway projects**" (Minn. R. 4410.4400, subp. 15), (16) "**[h]ighway projects**" (Minn. R. 4410.4400, subp. 16), (17) "**[b]large fleeting facilities**" (Minn. R. 4410.4400, subp. 17), (18) "**[w]ater appropriation and impoundments**" (Minn. R. 4410.4400, subp. 18), (19) "**[m]arinas**" (Minn. R. 4410.4400, subp. 19), (20) "**[w]etlands and public waters**" (Minn. R. 4410.4400, subp. 20), (21) "**[m]ixed residential and commercial-industrial projects**" (Minn. R. 4410.4400, subp. 21), (22) "**[s]ports or entertainment facilities**" (Minn. R. 4410.4400, subp. 22), (23) "**[w]ater diversions**" (Minn. R. 4410.4400, subp. 23), (24) "**[p]ipelines**" (Minn. R. 4410.4400, subp. 24), (25) "**[i]ncineration of wastes containing PCBs**" (Minn. R. 4410.4400, subp. 25), (26) "**[r]esorts, campgrounds, and RV parks in shorelands**" (Minn. R. 4410.4400, subp. 26), (27) "**[l]and conversion in shorelands**" (Minn. R. 4410.4400, subp. 27), and (28) "**[g]enetically engineered wild rice**" (Minn. R. 4410.4400, subp. 28).

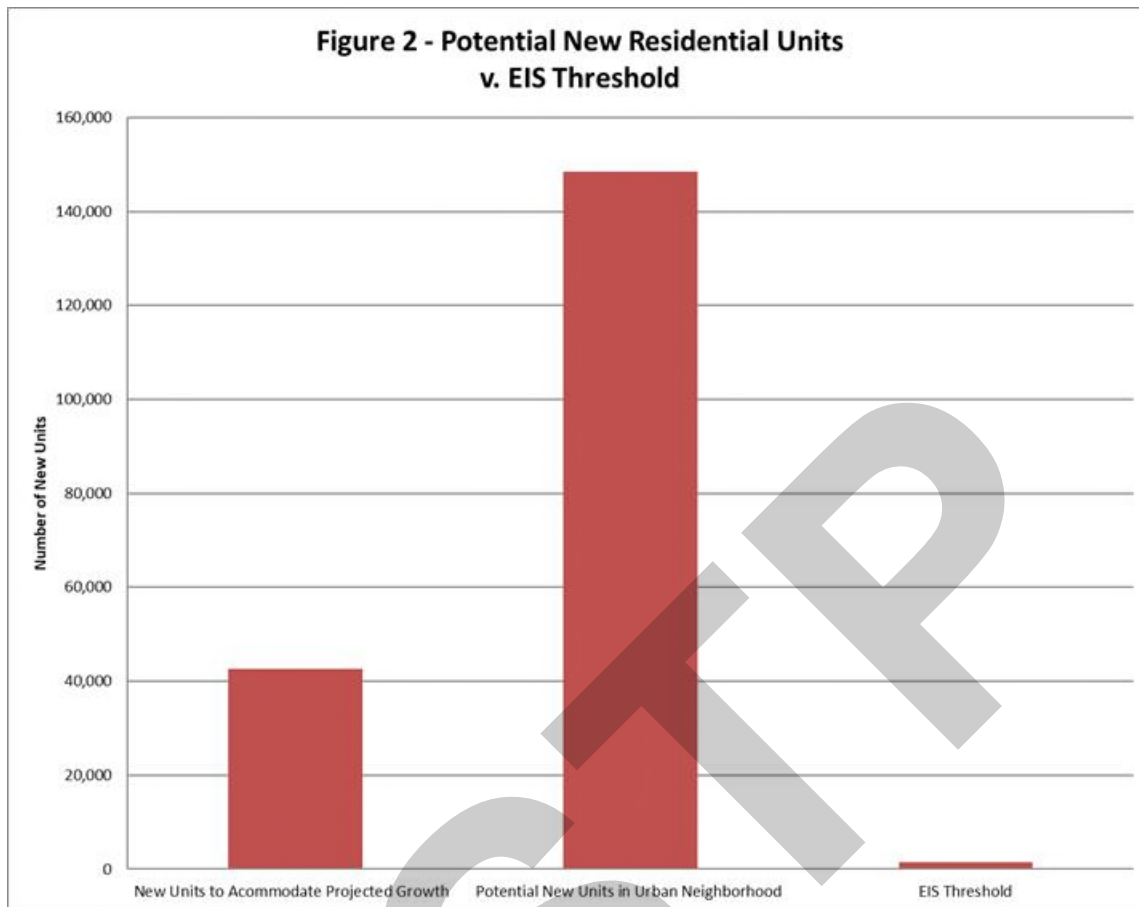
"anticipated new units" exponentially exceed subpart 14's EQB-required threshold of just "1,000 unattached units or 1,500 attached units" for a mandatory EIS, thereby evidencing the plan's overwhelmingly strong potential for material adverse environmental impacts.

58. In contrast to subpart 14's EQB-required threshold of just "1,000 unattached units or 1,500 attached units" for a mandatory EIS, Figure 1 illustrates, as follows, the 2040 Plan's over 42,000 "anticipated new units" "[b]ased on projected growth":



Id. at 3.

59. And, in contrast to subpart 14's EQB-required threshold of just "1,000 unattached units or 1,500 attached units" for a mandatory EIS, Figure 2 illustrates, as follows, the 2040 Plan's nearly 150,000 "anticipated new units" "[b]ased on allowable units per acre":



Id. at 6.

60. Based upon its irrefutable proof that its "anticipated new units" exponentially exceed subpart 14's EQB-required threshold of just "1,000 unattached units or 1,500 attached units" for a mandatory EIS, Sunde's Analysis concludes that "[t]he 2040 Plan results in large magnitude changes in land use. Increased density, use and scale resulting from the implementation of the 2040 Plan is likely to materially adversely affect the environment." *Id.* at 8 (emphasis added).

61. Given this Court's required deference to EQB's rulemaking determination that subpart 14's threshold of just "1,000 unattached units or 1,500 attached units" inherently poses such a potential for material adverse environmental impact that an EIS is mandated (*Reserve Mining Co. v. Herbst*, 256 N.W.2d 808, 824 (Minn. 1977) ("decisions of administrative agencies

enjoy a presumption of correctness, and deference should be shown by courts to the agencies' expertise and their special knowledge in the field of their technical training, education, and experience"), the 2040 Plan's exponential exceedance of this threshold satisfies by itself Plaintiffs' "prima facie showing." This conclusion is reinforced by the closely-related "**STATE ENVIRONMENTAL POLICY**," which "recogniz[es] the profound impact of human activity on the interrelations of all components of the nature environment, particularly the profound influences of [(1)] population growth [and] [(2)] high density urbanization." (Emphasis and bracketed information added).

b. BASIS NO. 2: "Environmental impacts relating to land use resulting from intensification of density, use and scale"

62. Sunde's Analysis' "Table 6 presents an estimate of the increase in residential density for existing single family R1/RA lots based on proposed built form districts":

Table 6 – Expected Increase in Density by Built Form District Existing R1/R1A Parcels							
Built Form District	Acres	Existing net density du/acre	Approx. current du	2040 expected density	Potential du	Potential new du	Percent increase in density
R1/R1A to Interior 1	5,074	7.10	36,036	10.17	51,602	15,566	43%
R1/R1A to Interior 2	2,801	7.25	20,305	18.08	50,642	30,377	149%
R1/R1A to Interior 3	238	7.28	1,733	22.60	5,379	3,646	210%
R1/R1A to Corridor 4	605	7.49	4,530	31.91	19,305	14,775	326%
R1/R1A to Corridor 6	59	6.74	398	36.09	2,129	1,731	435%

Id. at 12.

63. Figure 5, which follows, is a "visualiz[ation]" of this "increased density":



Id. at 13.

64. Based upon these "estimate[s]" for and "visualiz[ation]" of this increased density," Sunde's Analysis concludes that the 2040 Plan's "[p]roposed changes to land use result in a substantial increase in development intensity (allowed density or building height) and will permit new land uses not allowed under current zoning (e.g., low density residential use to medium or high density residential or commercial uses)." *Id.* at 10.

65. Sunde's Analysis further concludes that "[s]ignificant environmental impacts result from the change in land use and built forms," with the "likely impacts" inclusive of the following:

1. Increased noise impacts;
2. Increased pedestrian traffic;
3. Increased vehicle traffic;
4. Increased vehicle congestion and idling;
5. Decreased air quality;

6. Increased parking constraints;
7. Negative impacts to existing viewsheds (landmark buildings, open spaces, water bodies);
8. Longer hours of activity;
9. Reductions in privacy;
10. Increased light and glare from buildings;
11. Greater impacts from construction if construction of larger buildings than previously permitted increases the duration of construction activity;
12. Decreased access to light for surrounding properties;
13. Shadowing of adjacent properties;
14. Impacts to existing solar panels on neighboring structures.

Id. at 10-11 (emphasis added).

c. BASIS NO. 3: "Stormwater and Water Resource Impacts"

66. In modeling "likely impacts," Sunde's Analysis' Table 7 calculates, as follows, the percentage of hard (or impervious) surface area increase for each Built Form District:

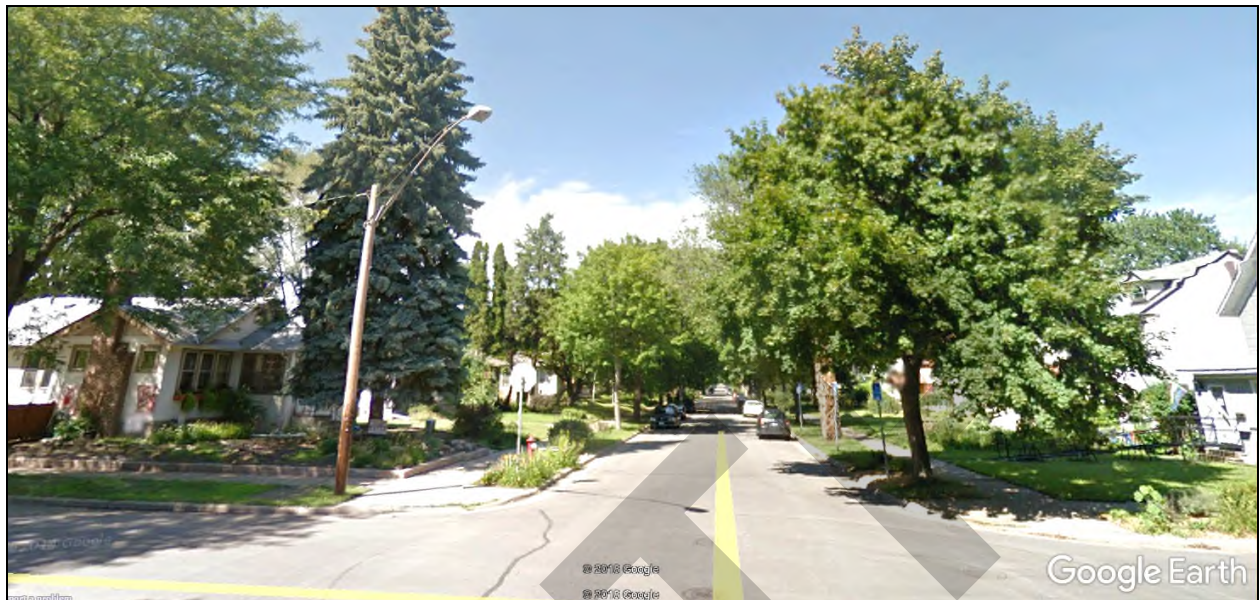
Table 7 – Average Percent Impervious Assumed in Analysis						
District	R1/R1A	Interior 1	Interior 2	Interior 3	Corridor 4	Corridor 6
Average % Impervious	50	60	65	70	85	85
% Increase in Hard Surface Area		10	15	20	35	35

An assumption of impervious area for each built form district was necessary because the 2040 Plan does not include specific building criteria (e.g. setbacks, impervious area) other than number of stories associated with each built form district and the visual renderings presented with each description of the various built form districts.

Id. at 19.

67. "To help visualize how each built form district will result in an increase in hard surface from the existing conditions, a series of viewsheds from existing R1 and R1A Districts that are within the future Interior 1, Interior 2, Interior 3, Corridor 4, and Corridor 6 Built Form Districts are compared to each of the corresponding built form districts. Built form districts are represented using the conceptual rendering of the built form district provided in the 2040 Plan (Figures 6-10). *Id.* at 19-24.

68. As one of these "impervious surface comparisons," Figure 8 vividly illustrates, as follows, the dramatic "increase in hard surface":



Existing: Looking north from Intersection of 33rd Street East and 38th Avenue South. Current Zoning R1A. Proposed Built Form Interior 2.



Proposed: Interior 2 Built Form (from 2040 Plan)

Figure 8
Interior 3 Impervious Surface Comparison

Id. at 21.

69. Based upon these percentages of impervious surface increases and these visual "before and after" comparisons thereof, Sunde's Analysis concludes, among other things, that:

Stormwater discharges are generated by stormwater and snowmelt runoff from land and impervious areas such as paved streets, parking lots, and building rooftops. As stormwater flows across the land and impervious surfaces, the runoff often picks up and transports pollutants in quantities that can adversely affect water quality. Increasing the amount of impervious surfaces increases rate of runoff and volume runoff. Uncontrolled, these increases result in impacts to water quality, increased flooding, and other impacts.

Id. at 16 (emphasis added).

70. Sunde's Analysis explains, as follows, the "likely result" therefrom:

12. Increasing hard surfaces without proper mitigation will likely result in:

- Increased volume of runoff flowing into local surface waters
- Increased rate of runoff into local surface waters
- Increased velocity of runoff into local surface waters
- Shorter time of concentration
- Increased pollutant loads to local surface waters
- Reduced groundwater recharge
- Increased frequency, severity, and duration of local flooding events
- Diminished capacity of stormwater drainage systems

13. Impacts to receiving waters without proper mitigation will likely result in:

- Stream widening and bank erosion
- Stream down cutting
- Changes to channel bed due to sedimentation
- Increases in floodplain elevations
- Degradation of aquatic structure
- Reduction in habitat diversity and aquatic biodiversity
- Reduced base flows
- Increased stream temperatures

Id. at 17-18.

(1) "Increased Contaminant Load"

71. Table 8 below documents, as follows, the modeled "increase in contaminant load on an annual basis" due to the increased impervious surface area:

Table 8 – Potential Annual Increased Contaminant Load to Storm Sewer System from redevelopment of R1/R1A parcels consistent with 2040 Plan			
Contaminant	Existing (pounds per year)	2040 Plan Buildout (pounds per year)	Increase (pounds per year)
Total Suspended Solids (TSS)	295,412	532,502	237,090
Total Phosphorous (TP)	1,171	1,957	786
Total Nitrogen (TKN)	5,622	9,201	3,579
Copper	168	281	113
Lead	63	111	47
Zinc	600	981	382
Hydrocarbons	7,881	13,818	5,937

Id. at 26.

72. Sunde's Analysis explains that "[t]he additional contaminant load resulting from the increased density and hard surface area of lots less than one acre in size will add to stress from pollutants such as nutrients, bacteria, and suspended solids on receiving waterbodies within these watersheds." *Id.*

73. Of additional concern, Sunde's Analysis notes that, "[a]ccording to information contained in Appendix F of the 2040 Plan, the existing storm sewer system has 419 outfalls that discharge into 22 lakes, four streams and the Mississippi River." *Id.* Worse yet, Sunde's Analysis adds that "[s]ome of these waterbodies are listed by the Minnesota Pollution control Agency as impaired waters, meaning they already have compromised water quality." *Id.*

74. "Figure 11, Increased Contaminant Load to Impaired Waters, illustrates a map of the existing storm sewer outfall locations, impaired waters and the current extent of low density residential lots that are in the future Interior 1, Interior 2, Interior 3, Corridor 4, and Corridor 6 Built Form Districts." *Id.* at 27. And this figure "illustrates the widespread nature of the impact the connection between increased contaminant loads and the city's stormsewer system, and the receiving surface water resources." *Id.* at 26.

(2) "Increased Volume of Runoff"

75. Tables 9 and 10 estimate, as follows, the "Increased Volume of Runoff" due to the increased impervious surface area:

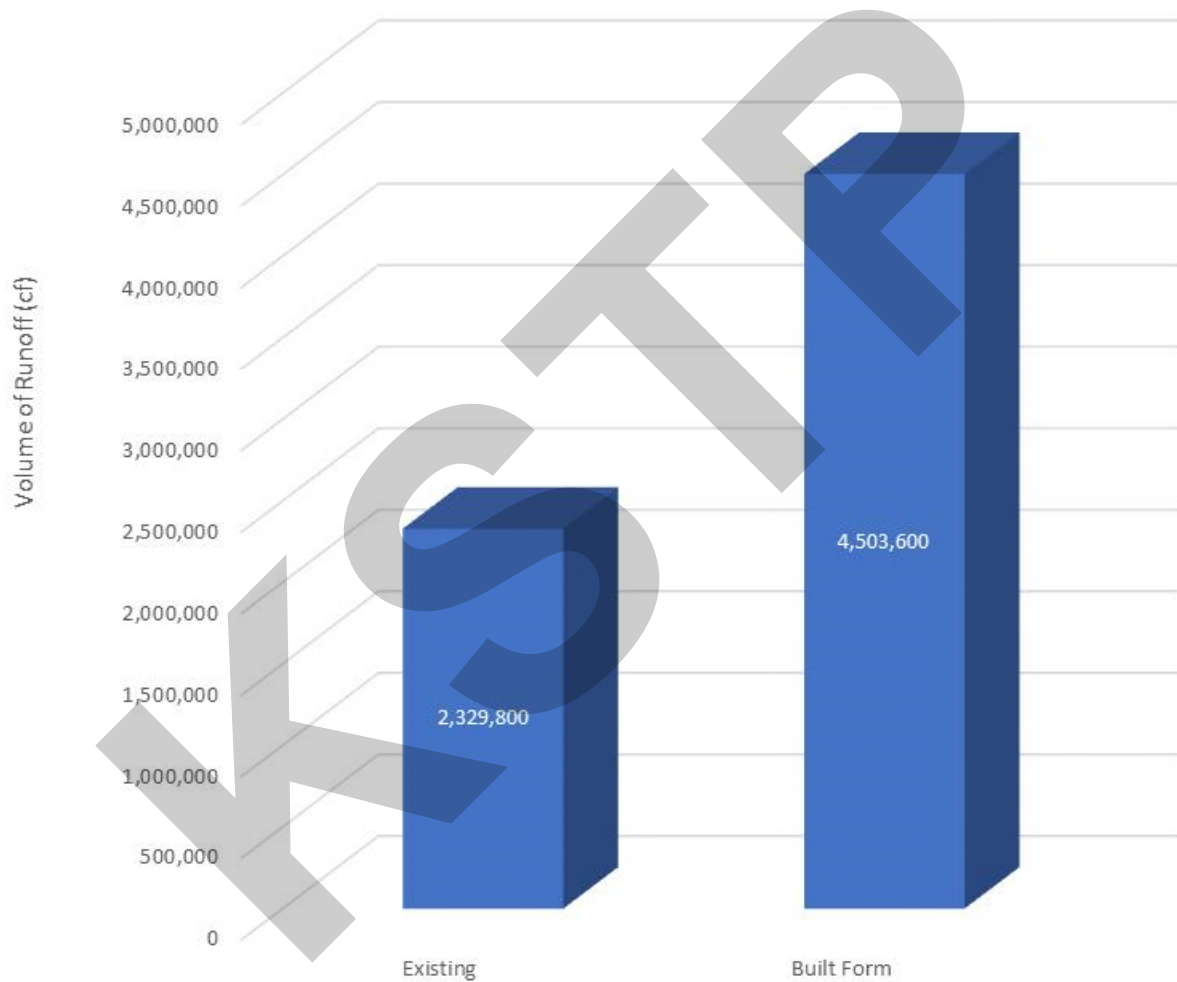
Table 9 – Increase in Rate of Stormwater Runoff from R1/R1A Parcels to Future Built Form Districts					
Event	Interior 1	Interior 2	Interior 3	Corridor 4	Corridor 6
	Increase	Increase	Increase	Increase	Increase
2-YR	16%	24%	31%	109%	109%
10-YR	9%	13%	18%	75%	75%
100-YR	3%	4%	5%	44%	44%

Table 10 – Increase in Volume of Stormwater Runoff from R1/R1A Parcels to Future Built Form Districts					
Event	Interior 1	Interior 2	Interior 3	Corridor 4	Corridor 6
	Increase	Increase	Increase	Increase	Increase
2-YR					
10-YR					
100-YR					

Id. at 28.

76. "For example, Figure 12 depicts the modelled increase in the volume runoff as a result of increased hard surface for 600 acres of existing single family lots redeveloping in the future to Corridor 3, 4, and 6 Built Form district":

Figure 12 Volume of Runoff
2 YR-24 HR Rainstorm Event
Existing Single family to Corridor 3, 4, and 6 Built Forms



Id. at 29.

77. Based on these calculations and this depiction, Sunde's Analysis concludes that the "likely impacts" are as follows:

1. Increased volume of runoff flowing into local surface waters
2. Increased rate of runoff into local surface waters
3. Increased velocity of runoff into local surface waters
4. Increased pollutant loads to local surface waters
5. Reduced groundwater recharge
6. Increased frequency, severity, and duration of local flooding events
7. Diminished capacity of stormwater drainage systems

Id. at 31.

d. BASIS NO. 4: "Traffic Impacts"

78. Sunde's Analysis calculates, as follows, the more than doubling of "total trips per day" from the 2040 Plan:

Table 11– Potential new daily vehicle trips Interior 1, Interior 2, and Interior 3 Built Form Districts							
	Parcels	du/parcel	du	Trip Generation Land Use Category	Rate of Trip/du ^c	Adjusted trips/du ^d (25% reduction)	Total Trips per day
Existing							
R1/R1A	57,500	1	57,500	single family	9.44	7.08	407,100
Total							407,100
2040 Plan							
Interior 1	36,000	3	108,000	multifamily low rise	7.32	5.49	592,920
Interior 2	20,000	3 ^a	60,000	multifamily low rise	7.32	5.49	329,400
Interior 3	1,500	3 ^b	4,500	multifamily mid rise	5.44	4.08	18,360
Total							940,680

^a up to 4 on larger lots

^b higher density allowed

^c ITE Trip Generation 10th, Ed.

^d 25% reduction for smart growth

Id. at 36.

79. Based on this analysis, Sunde's Analysis concludes as follows:

The widespread land use changes inherent in the 2040 Plan represent the potential for significant traffic impacts. Potential impacts include

- roadway and intersection capacity issues;
- pedestrian, bicycle, and vehicle safety conflicts;
- parking issues; and
- congestion and related air quality impacts.

Id. at 34.

VI. CITY'S REQUISITE "REBUT[TAL]" OR "AFFIRMATIVE DEFENSE" FAIL

A. FAILED "REBUT[TAL]": CITY DID NOT (AND CANNOT) "SUBMI[T] . . . EVIDENCE TO THE CONTRARY"

80. Strikingly, however, "[t]he 2040 Plan has not included a thorough evaluation of potential impacts of the plan on the environment" (Ex. 1 at 1), adding that instead "[t]he 2040 Plan lacks both [(1)] an identification of these impacts and [(2)] specific design criteria which could be utilized as a means of mitigating or reducing potential adverse environmental effects" (*id.* (emphasis and bracketed information added)).

81. Sunde's Analysis explains that "[t]he 2040 Plan has not included a thorough evaluation to identify environmental impacts that are a likely result of the adoption of the 2040 Plan. Without such evaluation, the specific criteria for mitigating likely adverse environmental impacts cannot be identified or incorporated into the regulating document. *Id.* (emphasis added).

82. For example, "Appendix B – Land Use . . . does not provide any discussion or identification of land use impacts associated with dramatic growth. Without first identifying impacts, meaningful mitigation cannot and has not been developed." *Id.* at 15 (emphasis added).

83. City's stormwater impacts analysis is, as follows, similarly lacking:

Appendix F Wastewater includes supporting content for wastewater related policies and satisfies the Metropolitan Council requirements related to wastewater, but it does not include any type of analysis to identify likely impacts related to or resulting from induced development permitted in the 2040 Plan.

With respect to stormwater the plan includes discussions and links to City's stormwater management plan regulations, and watershed districts. The plan does not evaluate capacity, discharge rates, and runoff volumes associated with the land use changes contemplated in the plan or the impacts of the increase in volume of runoff and contaminant loads on downstream water resources, some of which are currently impaired. The plan does not address downstream impacts to surface water resources that are likely to occur under the current regulations which apply for the most part to only to sites greater than one acre in size or areas within the MRCCA.

The appendix notes that certain areas of the city are currently subject to stormwater capacity issue. It does not address how the increased stormwater volumes will impact flooding. The plan includes a stormwater catchment inventory and describes the current impervious surface data based on existing use and receiving waters. The inventory does not include an assessment of the changes to the system that will result from the increased density associated with the new land use categories and built form districts within the pipesheds and receiving water bodies.

The Appendix F in general describes the need to balance multiple important water resource issues and concerns including aging infrastructure, management of flooding, and management of quantity and quality stormwater runoff as current trends in water resources management, but does not analyze the repercussions of the implementation of the 2040 Plan on water resources or the storm sewer infrastructure. It does not identify areas that will require mitigation to address those impacts or specific steps that could be taken to reduce or minimize impacts. Appendix F includes capital improvement projects to complete Environmental protection Agency Requirements for stormwater quality improvements. These are projects resulting from existing water quality and impaired waters issues and do not consider the additional impacts resulting from the 2040 Plan.

Policy 71 of the 2040 Plan includes "reduce impervious cover" as an action step in protecting and improving soil health. There is no discussion in the 2040 Plan or Appendixes on how this action step can be implemented or the inherent conflict between this action step and the requirement that each new development and redevelopment must meet the new built form guidance, which results in increased impervious surface as illustrated in Figures 6-10.

Id. at 33-34 (emphasis added).

84. In other words, "[t]he 2040 Plan has not evaluated [(1)] capacity, [(2)] discharge rates, and [(3)] runoff volumes associated with the land use changes contemplated in the plan or the impacts of the increase in volume of runoff and contaminant loads on downstream water resources, some of which are currently impaired," explaining that "[t]he current stormwater management regulations, which apply to sites greater than one acre in size, do not regulate these increases." *Id.* at 30 (emphasis and bracketed information added).

85. Similarly, "[t]he 2040 Plan does not include a transportation analysis that evaluates the impacts of implementing the range of land use alternatives identified in the 2040

Plan." *Id.* at 35. In fact, "[i]t does not [(1)] identify, [(2)] analyze, or [(3)] provide specific mitigation of transportation-related impacts." *Id.* (emphasis and bracketed information added).

86. For example, "Appendix D-Transportation" "does not address [(1)] the repercussions of the plan on congestion at key intersections in the city, [(2)] the impacts of removing off street parking requirements, or [(3)] pedestrian, bicycle vehicle conflicts that may result from the densification of certain areas of the city." *Id.* at 37 (emphasis and bracketed information added).

87. "Appendix D Transportation" is otherwise fundamentally lacking because (1) "[t]he appendix does not include any type of traffic impact analysis or evaluation of the transportation related impacts that are likely to occur as a result of the land use changes included in the 2040 Plan" (*id.*) and (2) "[t]he appendix does not address the ability of the local system designed and constructed to serve predominantly low density residential development over thousands of acres to now accommodate future traffic demands likely marked by localized areas of dramatic growth" (*id.*).

88. In summation, "[w]ithout identifying the impacts, the plan lacks specific mitigation to reduce or eliminate likely effects." *Id.* The 2040 Plan, including its appendices, thus contained literally no "rebut[al]" to Plaintiffs' "prima facie showing."

B. FAILED "AFFIRMATIVE DEFENSE": CITY DID NOT (AND CANNOT) "[S]HOW . . . THAT THERE IS [(1)] NO FEASIBLE AND PRUDENT ALTERNATIVE AND [(2)] THE CONDUCT AT ISSUE IS CONSISTENT WITH AND REASONABLY REQUIRED FOR PROMOTION OF THE PUBLIC HEALTH, SAFETY, AND WELFARE IN LIGHT OF THE STATE'S PARAMOUNT CONCERN FOR THE PROTECTION OF ITS AIR, WATER, LAND AND OTHER NATURAL RESOURCES FROM POLLUTION, IMPAIRMENT, OR DESTRUCTION"

89. City has effectively eschewed its requisite "affirmative defense" to Plaintiffs' "prima facie showing" by declining Plaintiffs' repeated requests that it voluntarily subject the

2040 Plan to an exhaustive environmental review, presumably an EIS or AUAR. Exhs. 3-5. In so doing, City, through Mayor Jacob Frey, expressed, as follows, a fundamental misunderstanding for (or, more likely, a feigned ignorance of) MERA:

You said to the citizens' group last night that you opposed environmental review of the 2040 Plan because all the studies show that increasing density decreases carbon emissions. But MERA addresses the existence of and correspondingly required mitigation of "likely" material adverse impacts arising from the 2040 Plan, not (as you suggested) whether those impacts outweigh or are lesser than the impacts from City's alternatives to the 2040 Plan, whatever they are. Indeed, MERA's effectively required EIS, as [was] done by Seattle for its own scaled-down upzoning project, would require City to assess that very issue—*i.e.*, prove or disprove your conclusion.

Ex. 5 (emphasis added).

90. Mayor Frey's full response on November 27, 2018 as to whether he was "in support of an environmental impact [statement]" is, as follows, even more revealing:

Jeffrey Niswanger: Are you in support of an environmental impact plan?

Mayor Jacob Frey: So the environmental piece is one area where we do disagree. The statistics — this is not my opinion at all — the statistics are exceedingly clear. There have been a ton of different studies on this and — I'm not arguing that increased density would be universally loved or accepted or liked — but increased density does lead to a substantially decreased carbon footprint. It's not my opinion; it is factually proven over and over and over again. In fact, there's nobody that's arguing that.

Keith Williams: What about water quality?

Frey: Water quality . . . actually it's the same piece as well with water quality.

Williams: Yeah.

Frey: I don't know all the specifics on water quality as much as I do carbon footprint. But density generally is an environmental tool. Now, again, does that mean it enhances livability, which is more subjective, and many people patently disagree with? No, it doesn't. Does that mean that it will improve your day-to-day lives for

you as a person? I cannot speak to that. But in terms of environmentalism, it's pretty . . it's cut and dry.

Katharine Brown: Have you done this research yourself? Have you seen this? Because this couldn't be farther from the truth.

Frey: No, I have not done the research myself. I read the reports.

Brown: I think you should.

Frey: I mean, the research has been conducted by experts; I'm not one.

Brown: It doesn't take an expert to know this is gonna deeply affect and hurt the environment in the City of Minneapolis. You can be a leader and you can try and save this and be a hero, or you're gonna destroy it. And I can assure you that if you don't stand for us and be a leader, you will not be mayor again. No one's gonna vote for you sir.

Ex. 9 (emphasis added).

91. Whether or not the purported environmental "reports" referenced by Mayor Frey actually exist, it is a record fact, as mentioned by Sunde's Analysis, that they were not part of or referenced in the 2040 Plan, including its appendices. Ex. 1. It is also a record fact that these "reports," if they exist, run directly counter to Sunde's Analysis.⁹ *Id.*

92. Moorhead, with its AUARs for its land use planning,¹⁰ and Seattle, with its EIS for its upzoning proposal,¹¹ as Plaintiffs explained to Mayor Frey on November 28, 2018 (Ex. 5),

⁹ Indeed, a study co-authored by an MIT professor disputes the conclusion that increased housing density necessarily results in a decreased carbon footprint. *See* MIT News, How Cities Can Fight Climate Change Most Effectively, available at [News.MIT.edu/2017/how-cities-can-fight-climate-change-most-effectively-1027](https://news.mit.edu/2017/how-cities-can-fight-climate-change-most-effectively-1027).

¹⁰ *See* documents available at <http://www.cityofmoorhead.com/home/showdocument?id=4776>; <http://www.cityofmoorhead.com/home/showdocument?id=4774>; and <http://www.cityofmoorhead.com/home/showdocument?id=4778>.

have demonstrated how City could have (and still could) satisfy its requisite "affirmative defense."

93. Despite its "exemption" therefrom under Minn. R. 4410.4600, subp. 26, Moorhead has thrice subjected its land use proposals to voluntary AUARs. *See* n.9.

94. In a closely-analogous situation, Seattle, as well, recently subjected its own upzoning proposal to an EIS. *See* n.10.

95. By so doing, Moorhead and Seattle prophylactically put the inherent environmental impacts of their land use proposals to the test and, as a result, progressively provided a forum for robust, judicially-reviewable public input on those environmental impacts and their mitigation thereto.

96. And, if it, like Moorhead and Seattle, had promptly subjected its 2040 Plan to a voluntary environmental review (*i.e.*, EIS or AUAR), then City could have, like them, not only (1) already completed such environmental review but also (2) been the responsible governmental unit (RGU) for the review thereof. Thus, because there is no other realistic way for it to satisfy its requisite "affirmative defense" to Plaintiffs' "prima facie showing," City has only itself to blame for its strategically-flawed decision to avoid the voluntary environmental review of the 2040 Plan.

VII. JURISDICTION & VENUE

97. Jurisdiction and venue are appropriate under MERA. Minn. Stat. § 116B.03, subds. 1 and 4.

¹¹ *See* document available at https://www.seattle.gov/Documents/Departments/HALA/Policy/MHA_FEIS/0_CoverFactSheet_MHA_FEIS_2017.pdf.

VII. CAUSES OF ACTION

COUNT ONE: DECLARATORY JUDGMENT UNDER MERA

98. The parties dispute whether Plaintiffs have satisfied their "prima facie showing" under MERA that the 2040 Plan "is likely to cause the pollution, impairment, or destruction of the air, water, land or other natural resources located within the state."

99. The parties also dispute whether City has (or can) satisfy its corresponding requirement under MERA to either (1) "rebut the prima facie showing by the submission of evidence to the contrary or (2) "show, by way of an affirmative defense, that [(a)] there is no feasible and prudent alternative and [(b)] the conduct at issue is consistent with and reasonably required for promotion of the public health, safety, and welfare in light of the state's paramount concern for the protection of its air, water, land and other natural resources from pollution, impairment, or destruction," though "[e]conomic considerations alone shall not constitute a defense hereunder."

100. The parties further dispute whether the appropriate "relief" under MERA for City's failure to satisfy its MERA-required "rebut[tal]" or "affirmative defense" to Plaintiffs' "prima facie showing" is to (1) immediately enjoin City's approval of the 2040 Plan and (2) order the continuation of the injunction unless and until City satisfies its burden, presumably through a voluntary environmental review (*i.e.*, EIS or AUAR).

101. As shown above, Plaintiffs are entitled to a declaration they have met their MERA-required "prima facie showing."

102. As shown above, Plaintiffs are also entitled to a declaration that City has not (and cannot) satisfy their MERA-required "rebut[tal]" or "affirmative defense" to Plaintiffs' "prima facie showing."

103. As shown above, Plaintiffs are further entitled to both (1) an immediate injunction enjoining City's approval of the 2040 Plan and (2) an order continuing the injunction unless and until City satisfies its MERA-required "rebut[tal]" or "affirmative defense" to Plaintiffs' "prima facie showing," presumably through a voluntary environmental review (*i.e.*, EIS or AUAR).

COUNT TWO: INJUNCTIVE RELIEF UNDER MERA

104. Because, as shown above, Plaintiffs have met their "prima facie showing" and City has not (and cannot) satisfy its MERA-required "rebut[tal]" or "affirmative defense" thereof, a MERA claim has been stated and "relief" is compelled.

105. The appropriate relief is to (1) immediately enjoin City's approval of the 2040 Plan and (2) order its continuation unless and until City satisfies its MERA-required "rebut[tal]" or "affirmative defense" to Plaintiffs' "prima facie showing," presumably through a voluntary environmental review (*i.e.*, EIS or AUAR).

VIII. PRAYER FOR RELIEF

Plaintiffs respectfully request the following relief:

1. A declaration in favor of Plaintiffs against City that they have satisfied their MERA-required "prima facie showing" that the 2040 Plan "is likely to cause the pollution, impairment, or destruction of the air, water, land or other natural resources located within the state."

2. A declaration in favor of Plaintiffs against City that the City has not (and cannot) satisfy its corresponding requirement under MERA to either (1) "rebut the prima facie showing by the submission of evidence to the contrary or (2) "show, by way of an affirmative defense, that [(a)] there is no feasible and prudent alternative and [(b)] the conduct at issue is consistent with and reasonably required for promotion of the public health, safety, and welfare in light of the state's paramount concern for the protection of its air, water, land and other natural resources from pollution, impairment, or destruction," though "[e]conomic considerations alone shall not constitute a defense hereunder."

3. A declaration that, because of City's failure to satisfy its MERA-required "rebut[tal]" or "affirmative defense" to Plaintiffs' "prima facie showing," Plaintiffs are entitled to (1) an immediate injunction enjoining City's approval of the 2040 Plan and (2) an order continuing the injunction unless and until City satisfies its MERA-required burden, presumably through a voluntary environmental review (*i.e.*, EIS or AUAR).

4. A temporary and permanent injunction (1) immediately enjoining City from approving of the 2040 Plan and (2) ordering its continuation unless and until it satisfies its requisite "rebut[tal]" or "affirmative defense" to Plaintiffs' "prima facie showing," presumably through a voluntary environmental review (*i.e.*, EIS or AUAR).

5. A recovery by Plaintiffs against City of their reasonable costs, disbursements and attorneys' fees incurred in bringing and successfully prosecuting this MERA action.

6. All other legal and equitable relief deemed appropriate by this Court.

DATED: December 3, 2018

BRIGGS AND MORGAN, P.A.

By /s/ Jack Y. Perry

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**ATTORNEYS FOR STATE OF
MINNESOTA BY PLAINTIFFS
SMART GROWTH MINNEAPOLIS, LLC,
AUDUBON CHAPTER OF MINNEAPOLIS
AND MINNESOTA CITIZENS FOR THE
PROTECTION OF MIGRATORY BIRDS**

ACKNOWLEDGMENT

The parties, through their undersigned counsel, hereby acknowledge that sanctions may be imposed for a violation of Minn. Stat. § 549.211, subd. 2 pursuant to Minn. Stat. § 549.211, subd. 3.

s/ Jack Y. Perry

Jack Y. Perry

KSTP

VERIFICATION

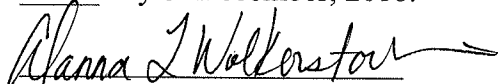
STATE OF MINNESOTA)
) ss.
COUNTY OF HENNEPIN)

I, John Goetz, a duly-authorized representative of Smart Growth Minneapolis, LLC, have read the contents of the above Verified Complaint for Declaratory and Other Relief. Based on my personal knowledge, the facts stated therein, including the attached exhibits and attachments, are true.



John Goetz

Subscribed and sworn to before me this
3rd day of December, 2018.



Notary Public

My commission expires: January 31, 2023



11237223v8

November 2018

Environmental Analysis

Minneapolis 2040 Plan

KSTP



SUNDE ENGINEERING, PLLC.
10830 Nesbitt Avenue South
Bloomington, MN 55437-3100

November 2018

Environmental Analysis Minneapolis 2040 Plan

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a Duly Licensed Professional Engineer under the Laws of the State of Minnesota.



Kirsten Pauly, PE

November 29, 2018

Date

21842

MN Registration No.

1.0 Executive Summary

The revised draft of Minneapolis 2040 (2040 Plan) was released in the Fall 2018. The 2040 Plan establishes a dramatic shift in land use policy with a general city wide increase in permitted density. Proposed changes in land use consistent with the 2040 Plan and policy inherently impact the environment as well as existing infrastructure that was implemented based on entirely different design criteria.

The 2040 Plan has not included a thorough evaluation to identify environmental impacts that are a likely result of the adoption of the 2040 Plan. Without such evaluation, the specific criteria for mitigating likely adverse environmental impacts cannot be identified or incorporated into the regulating document.

Typically, development projects are subject to mandatory thresholds for environmental review. Successful environmental review first identifies whether or not there are aspects of the proposed project that are likely to cause environmental impacts and then establishes specific mitigation for minimizing or eliminating impacts before any project approvals can be considered. Environmental review provides an opportunity for the development of proactive mitigation measures that may guide and inform the ultimate nature of a project prior to approval.

This report provides a review of some topics of environmental impact likely to result from adoption of the 2040 Plan. The report does not attempt to address all areas of environmental concern. Typical environmental review encompasses a more detailed analysis of issues and addresses a much broader number of topics of concern.

Other projects conducted within the state that propose a fraction of the magnitude of change contemplated by the 2040 Plan are subject to environmental review. This is because they exceed mandatory environmental review thresholds and inherently represent an increased risk of causing significant environmental effects. The 2040 Plan is no exception. The magnitude of physical impact to the environment resulting from the 2040 Plan is likely to cause pollution and impairments to the environment. The 2040 Plan lacks both an identification of these impacts and specific design criteria which could be utilized as a means of mitigating or reducing likely adverse environmental effects.

2.0 Project Magnitude data

To illustrate that the 2040 Plan will induce development in a manner that is likely to cause direct or indirect physical manipulation of the environment, project magnitude data was evaluated for comparison with the Environmental Impact Statement (EIS) Mandatory Thresholds for residential development.

Minn. Rules 4410.4400 establish mandatory Environmental Impact Statement (EIS) categories. Minn. Rules 4410.4400 subp. establish a threshold test for each mandatory category. An EIS must be prepared for projects that meet or exceed the thresholds established in the Rule.

When evaluating project magnitude data for phased residential development, Minn. Rules require that the total number of potentially buildable units are included in the threshold analysis regardless of whether or not the whole area is proposed for immediate development¹. When specific development plans are not available, the number of potentially buildable units is calculated from the maximum allowable units per acre, or if the ordinance does not specify, from the average number of units per acre from the area as planned, multiplied by the number of acres. If the total potential number of units exceeds a mandatory threshold, review is required for all phases.

The 2040 Plan magnitude data was developed in this manner.

2.1 Residential Development Mandatory EIS Category

Minn. Rules 4410.4400 subp. 14 establish the threshold for mandatory EIS for the residential development category. The threshold for mandatory review of residential developments that propose the construction of a permanent or potentially permanent residential development is 1,000 unattached units or 1,500 attached units. In accordance with Environmental Quality Board (EQB) guidance, single family, duplex and triplex units are considered unattached while four or more units to a building are defined as attached. Each individual dwelling unit counts as one unit; therefore, a 24-unit apartment building equals 24 attached units.

2.2 Anticipated New Units – Based on projected growth

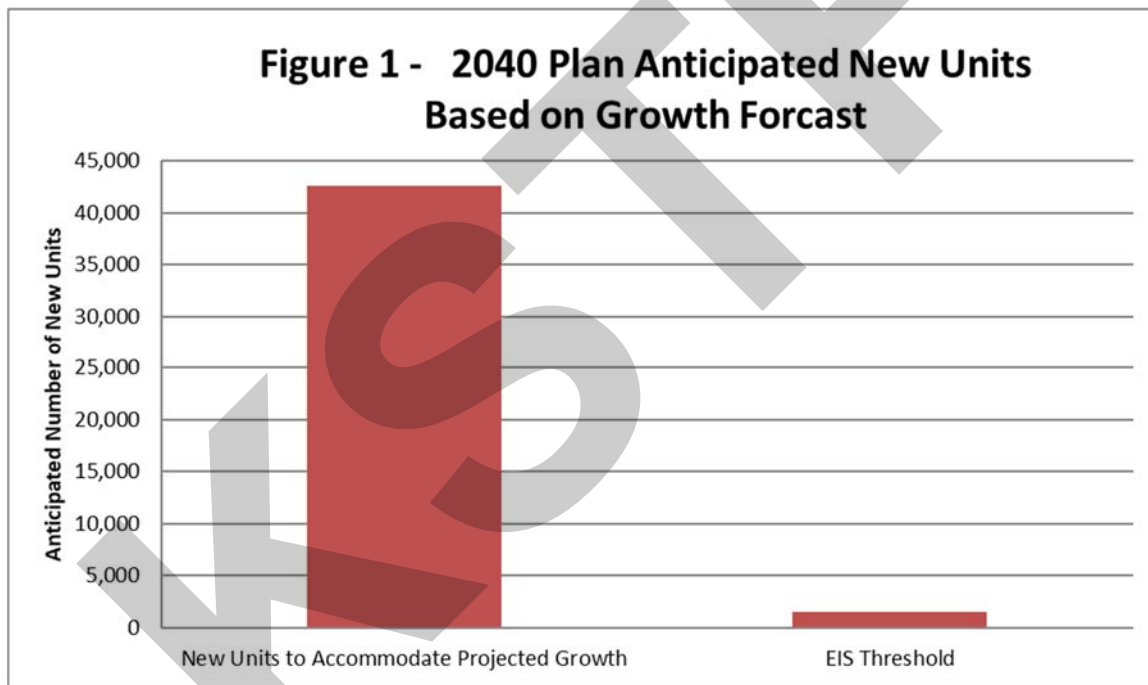
One threshold density calculation was performed for new residential units in ten year stages using data included in the 2040 Plan (Appendix B Figure 3-1 Land Use Table in 10 Year Stages)². New residential units to accommodate growth projections were calculated based on the increase in acres of each land use allowing residential development, multiplied by the average of the typical density range (dwelling units (du) per acre). The results are presented in Table 1. The average of the reported typical density range from the 2040 Plan is presented below. Calculations of the anticipated new residential units based on the maximum and the expected growth density were also performed and included in Attachment 1.

¹ Minn. Rules 4410.4300 subp. 19 and Minn. Rules 4410.4400 subp. 14.

²Minneapolis 2040 Revised Draft with Appendixes, undated - released Fall 2018 - Appendix B Table 3-1 Land Use.

Table 1 - Projected New Residential Units Based on Anticipated Growth			
	By 2020	By 2030	By 2040
Projected New Residential Units	12,590	25,048	42,630
Mandatory EIS Threshold (Units)	1,500	1,500	1,500

The results of this calculation illustrate that during every stage of development, the mandatory EIS threshold is exceeded. However, the calculation essentially just illustrates new housing units required to accommodate the City's projection of population growth and the expected growth within various land use categories. Figure 1 compares the number of new units expected to meet growth forecasts compared to the EIS mandatory threshold for residential development.



It should be noted that the above calculation is conservative as the total expected number of residential units by 2040, based on other information included in the 2040 Plan (Figure 4-1 of Appendix B Fall 2018 Draft) is 48,908 new units, as illustrated on Table 2 below.

Table 2 - Anticipated New Units 2040 Plan		
New Units	DU/Acre	Future land use category
8,163	37.19	Urban Neighborhood
93	29.04	Neighborhood Mixed Use
4,525	59.91	Corridor Mixed Use
18,934	122.51	Community Mixed Use
6,755	136.15	Destination Mixed Use
9,454	1,704.74	Public, Office and Institutional
984	23.72	Production Mixed Use
48,908	<u>Total New Units</u>	

This initial calculation fails to determine the number of *potential* residential units resulting from the adoption of the 2040 Plan. The 2040 Plan does not limit development within any land use category or in accordance with growth projections. The 2040 Plan allows for substantially greater number of residential units to be built than is needed to accommodate projected population growth and some areas of the city may experience dramatic growth.

2.3 Potential New Units – Based on allowable units per acre

In accordance with environmental review guidance, potential buildable units are calculated from the maximum allowable units per acre, or if the ordinance does not specify, from the average number of units per acre from the area as planned, multiplied by the number of acres. If the total potential number of units exceeds a mandatory threshold, review is required for all phases.

Table 3 illustrates the typical range, average of the typical range, and expected growth density for each future land use category presented in the 2040 Plan³. The average growth density was used to calculate potential new residential units, although the 2040 Plan notes that it is not inconsistent to build at higher densities.

³ 2040 Plan undated Fall 2018 Draft Appendix B Land Use

Table 3 - Typical Range, Average and Expected Density (from 2040 Plan)			
Land Uses Allowing Residential Development	Typical Density Range (du/acre)	Average Density (du/acre)	Expected Density (du/acre)
Urban Neighborhood	8-40	24	37.19
Neighborhood Mixed Use	8-40	24	29.04
Corridor Mixed Use	8-75	41.5	59.91
Community Mixed Use	12-125	68.5	122.51
Destination Mixed Use	75-150	112.5	136.15
Production Mixed Use	15-25	20	23.72
Public Office and Institutions	8-175	91.5	170.74

The following analysis is limited to the potential new residential units in the **Urban Neighborhood** future land use category. This is the largest future land use category in terms of size, encompassing nearly 50% of the city. The approximate acres of low density residential parcels (those parcels currently zoned R1, R1A, R2, and R2A) that will be in the Urban Neighborhood future land use category was calculated⁴.

The potential increase in residential units was obtained by determining the difference between the number of currently permitted dwelling units and the number of future permitted dwelling units. The number of future permitted dwelling units is based on the average of the typical range that is included in the 2040 Plan⁵. Potential new units were determined by applying the difference between the average density and the currently permitted density over the number of acres of existing low density residential land use that will be in the Urban Neighborhood future land use category. The results are summarized in Table 4 and Figure 2.

The estimate of the number of potential new residential units within the Urban Neighborhood future land use category is conservative because it does not use the maximum permitted density or the expected growth density that is included in the 2040 Plan, both of which would yield more units. It also uses a conservative number of acres in the Urban Neighborhood future land use district as a basis for the calculation.⁶ Using the

⁴ Non-residential parcels, such as churches and parks were excluded to the extent practical. It is reasonable to assume that these non-residential uses will remain.

⁵ 2040 Plan undated Fall 2018 Draft Appendix B Land Use

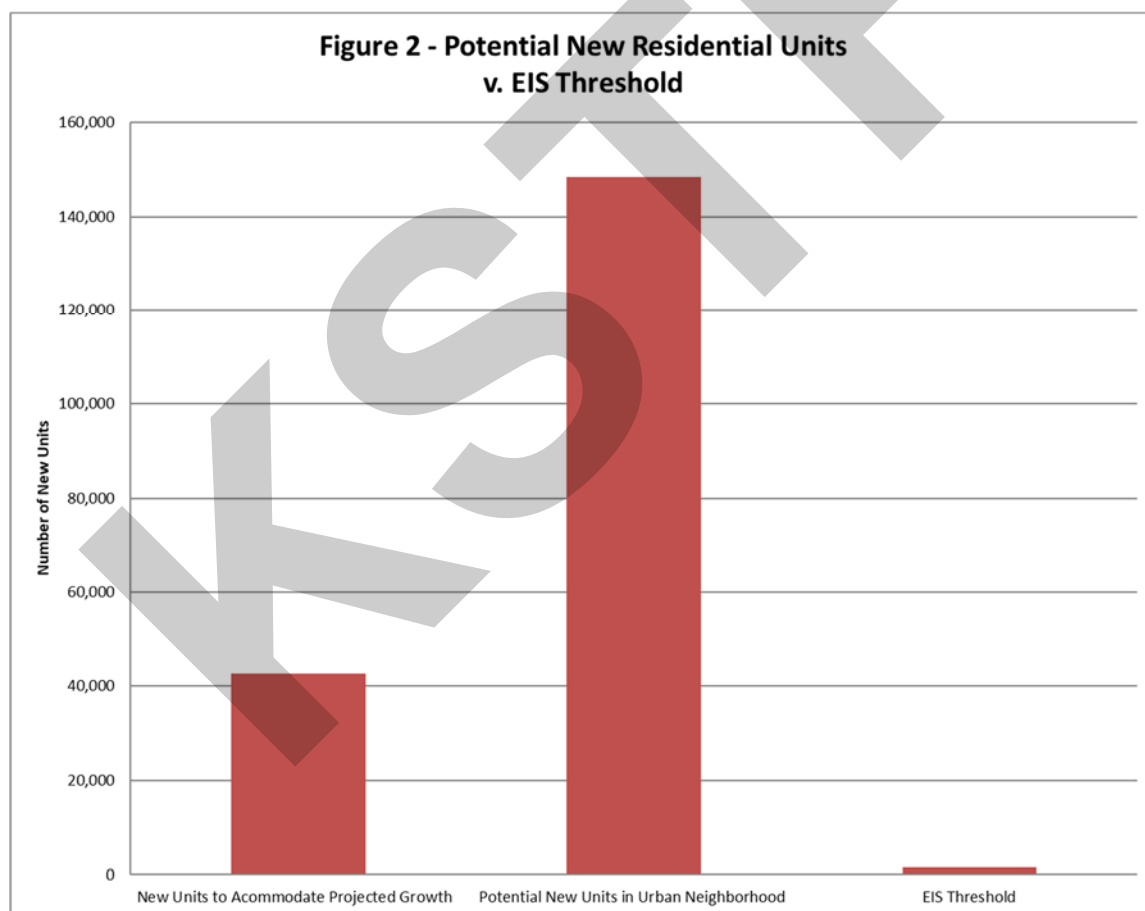
⁶ The calculation is based on a total of 11,300 acres of existing low density residential converting to Urban Neighborhood future land use. The 2040 Plan indicates that there are 12,139.78 acres of existing low density, and 14,095 acres of Urban Neighborhood in 2040. Our calculations, which did not include parks, schools or other obvious nonresidential uses resulted in approximately 11,544 acres of current low density residential converting to Urban Neighborhood future land use. Because of last minute revisions to land use categories by the city that could potentially affect this number, a conservative total of 11,300 acres was used.

expected density of 37.19 du/unit increases the number of potential new units to 297,436 (Attachment 1).

Current Zoning District	Acres in UN^a	Existing permitted density (du/acre)	Current permitted (du)^b	Future permitted avg density (du/acre)	Future (du)	Potential New Units (du)
R1/R1A	8,700	8.71	74,035	24	204,000	129,965
R2/R2B	2,800	17.42	48,776	24	67,200	18,424
Total	11,300		122,811		271,200	148,389

^aUN = Urban Neighborhood future land use category

^b Based on min lot size see Table 5



Increased residential density resulting in an increase in potential residential units is not limited to the Urban Neighborhood future land use category. There are six other future land use categories that allow residential development. Some existing low density residential

parcels will be guided to Neighborhood Mixed Use, Corridor Mixed Use, Community Mixed Use, etc. These other future land use designations are associated with different net densities (see Table 3) and represent an even greater number of potential residential units permitted by the 2040 Plan. In general, the 2040 Plan allows for higher densities in every future land use category.

The area of induced development as a result of allowable increased density within the Urban Neighborhood land use category encompasses approximately 45% of the City of Minneapolis. The magnitude of allowed and encouraged development within this one future land use district alone demonstrates a physical manipulation of the environment, directly or indirectly, on almost half of the land within the City of Minneapolis. Figure 3 illustrates the extent of the area affected by the densification of the Urban Neighborhood future land use category.

Direct and indirect impacts that are likely to be caused by the increased density allowed in the 2040 Plan are discussed in the following sections. This is not intended to be an exhaustive list but serves to illustrate some areas of likely impact to air, water or other natural resources that have not been identified or mitigated in the 2040 Plan.

3.0 Land Use:

The 2040 Plan results in large magnitude changes in land use. Increased density, use and scale resulting from the implementation of the 2040 Plan is likely to materially adversely affect the environment.

3.1. Summary of Land Use Issues

1. Land use impacts have not been adequately analyzed, identified, or mitigated within the 2040 Plan.
2. Minneapolis will likely experience continued housing and employment growth. Future growth is anticipated to occur as guided and encouraged by the comprehensive plan policies. This will result in changes to current land use patterns that will occur over time.
3. Permitted changes will result in intensification of density, use, and scale on a city-wide basis.
4. Denser and more intensive housing and commercial development will be permitted primarily in the existing low density residential zoning districts.
5. The most significant impacts will occur in areas currently characterized by relatively low density that are guided to more intensive density.

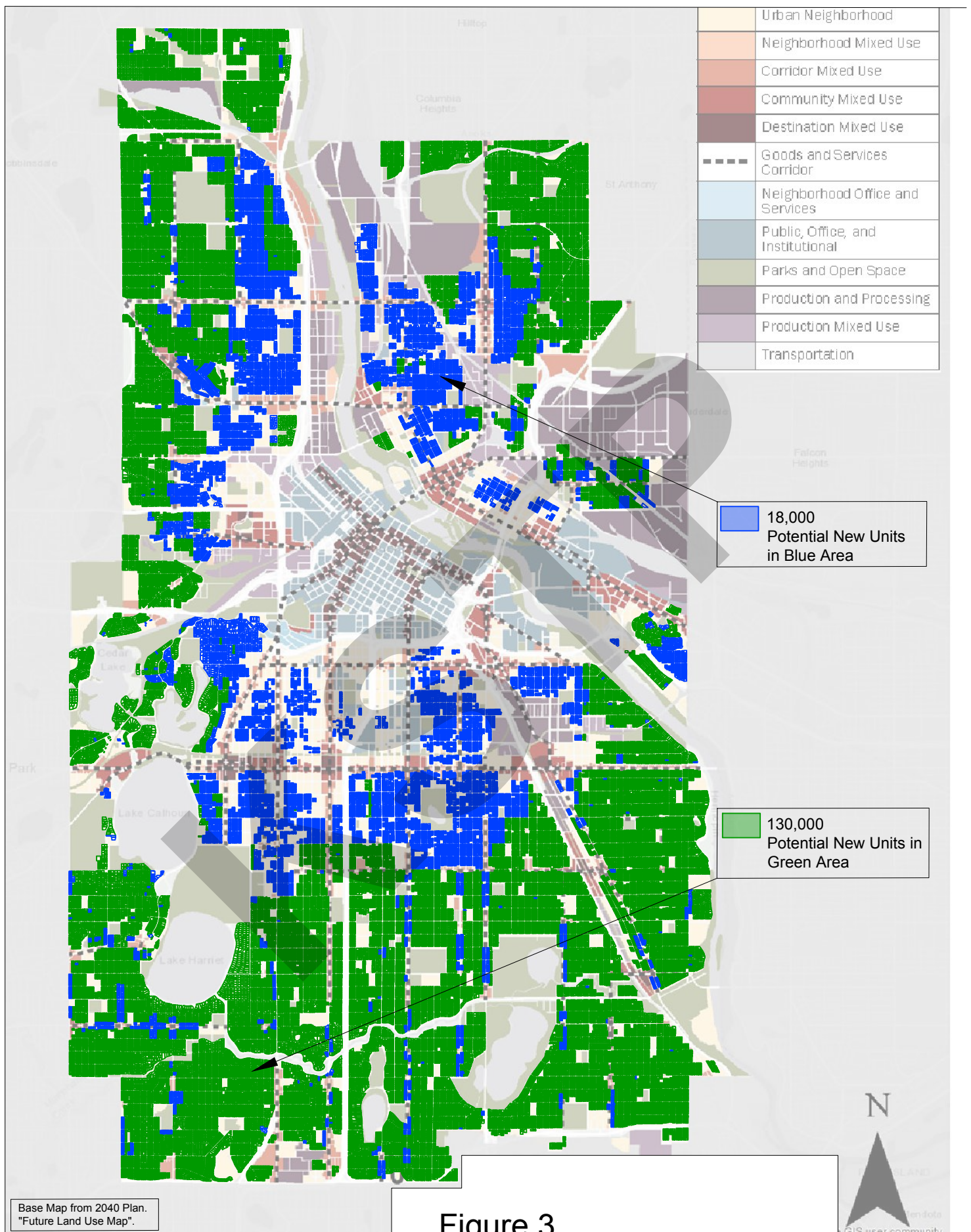


Figure 3

Number of New Units Based on
Average of Typical Density

Existing Low Density Residential to Urban Neighborhood
Location of Potential New Residential Units

6. Other zoning districts may experience land use impacts as well, as the 2040 Plan generally moves towards greater densities and scales in all land use areas, however the magnitude of those impacts will not be as great.
7. The current Minneapolis zoning code describes low density residential as the R1, R1A, R2, and R2B zoning districts.
8. The 2040 Plan indicates that there are currently 85,508 parcels of low density residential land use.
9. The 2040 Plan indicates that low density land use currently encompasses 12,139.78 acres, or 49.73% of the City of Minneapolis⁷.
10. The current net density for the existing R1 and R1A residential land use is approximately 7.18 du/acre. The current net density for R2 and R2B residential land uses is approximately 14.11 du/acre. These estimates are based on existing low density residential parcels with current residential land uses. Existing net density is lower than permitted net density because some parcel sizes are larger than the minimum requirements. Table 5 summarizes permitted and expected residential densities.

Current Zoning	Acres	Parcels	Permitted du/parcel	Permitted Dwelling Units	Existing Net Density (du/acre)	Permitted Net Density (du/acre)	Expected Density Urban Neighborhood
R1/R1A	8,777	63,034	1	63,034	7.18	7.26-8.71	37.19
R2/R2B	2,965	22,021	2	41,842	14.11	14.52-17.42	37.19

11. The majority of low density residential parcels will be within the Urban Neighborhood future land use category. The expected density for the Urban Neighborhood land use category is 37.1 du/acre.
12. The 2040 Plan indicates that it is not inconsistent with the plan to have greater densities than the expected densities
13. Approximately 8,700 acres with permitted net densities of 7.26 to 8.71 du/acre, based on minimum allowed lot sizes, will be guided to Urban Neighborhood future land use category, with an expected growth density of 37.19 du/acre.

⁷ 2040 Plan Appendix B Land Use Table of Existing Land Use Acres

14. This results in a potential increase in density of over four times the current permitted density for R1 and R1A lots. This impact effects approximately 35% of the City.
15. Approximately 2,800 acres with permitted densities of 14.52 to 17.54 du/acre based on minimum allowed lot sizes will be guided to Urban Neighborhood future land use category, with an expected growth density of 37.19 du/acre.
16. This results in a potential increase in density of over two times the current permitted density of R2 and R2B lots. This impact effects approximately 12% of the City.
17. Approximately 47% of the City of Minneapolis will be impacted by the resulting intensification of density, intensification of use, and intensification of scale that is permitted and encouraged in the Urban Neighborhood future land use category under the 2040 Plan.
18. Other future land use categories will be guided to increased density but were not addressed in this report.

3.2 Environmental impacts relating to land use resulting from intensification of density, use and scale:

Proposed changes to land use result in a substantial increase in development intensity (allowed density or building height) and will permit new land uses not allowed under current zoning (e.g., low density residential use to medium or high density residential or commercial uses).

Significant environmental impacts result from the change in land use and built forms. These impacts are the result of intensification of density, intensification of use, and intensification of scale established in the 2040 Plan. Likely impacts include:

1. Increased noise impacts;
2. Increased pedestrian traffic;
3. Increased vehicle traffic;
4. Increased vehicle congestion and idling;
5. Decreased air quality;
6. Increased parking constraints;
7. Negative impacts to existing viewsheds (landmark buildings, open spaces, water bodies);
8. Longer hours of activity;
9. Reductions in privacy;
10. Increased light and glare from buildings.
11. Greater impacts from construction if construction of larger buildings than previously permitted increases the duration of construction activity;
12. Decreased access to light for surrounding properties;

13. Shadowing of adjacent properties; and
14. Impacts to existing solar panels on neighboring structures.

3.3 Analysis of Intensification of Density, Use and Scale

This section analyzes the effect of the 2040 Plan on density, use and scale. Land use impacts are not limited to the examples given below but represent the area of greatest impact. Impacts are not necessarily limited to the land within the regulated area. There is potential for conflicts and changes in character at the edges of areas with a significant land use change. Areas where greater intensity development abuts lower intensity development create potential land use impacts as well.

3.3.1 Intensification of Density

Residential density increases occur when density limits in the land use plan are changed or removed altogether allowing a property of a given size to have more housing units. Land use impacts may occur from an increase in the allowed density of activity on a lot or site. The 2040 Plan results in allowed density increases on all existing low density residential districts (R1/R1A and R2/R2B). The allowed density increases from one or two dwelling units (du) per lot to at least three du/lot and some of the existing low density lots are in built form districts with no density limits at all.

Figure 4 Expected Growth Density by Built Form District
Excerpt from 2040 Plan Appendix B

Future Built Form Category	New Units	DU/Acre
Interior 1	1,214	10.17
Interior 2	1,618	18.08
Interior 3	2,427	22.60
Corridor 4	2,832	31.91
Corridor 6	3,113	36.09
Transit 10	6,472	69.84
Transit 15	4,245	97.70
Transit 20	9,200	145.20
Transit 30	13,327	217.80
Core 50	4,460	181.50
Production	-	0.00

Note: These numbers represent expected prevailing future residential density for new development in the identified land use and built form districts. It is not inconsistent with the policies in this plan to build at residential densities greater than those identified in this table.

Minneapolis does not regulate maximum density based on du/acre. However, the 2040 Plan includes expected typical density ranges for the different built form districts. The 2040 Plan indicates that building at residential densities greater than the typical range presented is not inconsistent with the policies of the 2040 Plan. The built form districts guide the scale of development for every parcel in the city regardless of the underlying land use category. The built form of all new and remodeled buildings must be consistent with the guidance of the built form map.

Table 6 presents an estimate of the increase in residential density for existing single family R1/RA lots based on proposed built form districts. The table presents the increase in density that is consistent with the policies of the 2040 Plan for the main built form districts that the current single family zoning districts will be located in (Interior 1, Interior 2, Interior 3, Corridor 4 and Corridor 6⁸).

Built Form District	Acres	Existing net density du/acre	Approx. current du	2040 expected density	Potential du	Potential new du	Percent increase in density
R1/R1A to Interior 1	5,074	7.10	36,036	10.17	51,602	15,566	43%
R1/R1A to Interior 2	2,801	7.25	20,305	18.08	50,642	30,377	149%
R1/R1A to Interior 3	238	7.28	1,733	22.60	5,379	3,646	210%
R1/R1A to Corridor 4	605	7.49	4,530	31.91	19,305	14,775	326%
R1/R1A to Corridor 6	59	6.74	398	36.09	2,129	1,731	435%

The built form districts included in Table 6 represent the majority of districts that R1 and R1A will be converted to. A description of the built form districts are as follows:

Interior 1: up to three dwelling units per lot, farthest from downtown, not adjacent to transit routes, lots not combined. The expected density is 10.17 however, the permitted density is approximately 21du/acre. Therefore, the expected density is significantly lower than the permitted density.

Interior 2: up to three dwelling units per lot, multi-family buildings with more than three units are permitted on larger lots, larger not defined. Areas between transit routes and intermittent local transit service, limited combing of lots permitted. The permitted density is at least 21 du/acre, greater in areas with larger lots. The expected density is 18.08 du/acre.

Interior 3: no maximum density assigned, building heights 1-3 stories, variety of building types on both small and moderate sized lots, combing lots allowed. The expected density is 22.60 du/acre. A higher density would not be inconsistent with the 2040 Plan.

⁸ The 2040 Plan does not include expected densities for the recently added Corridor 3 Built Form District.

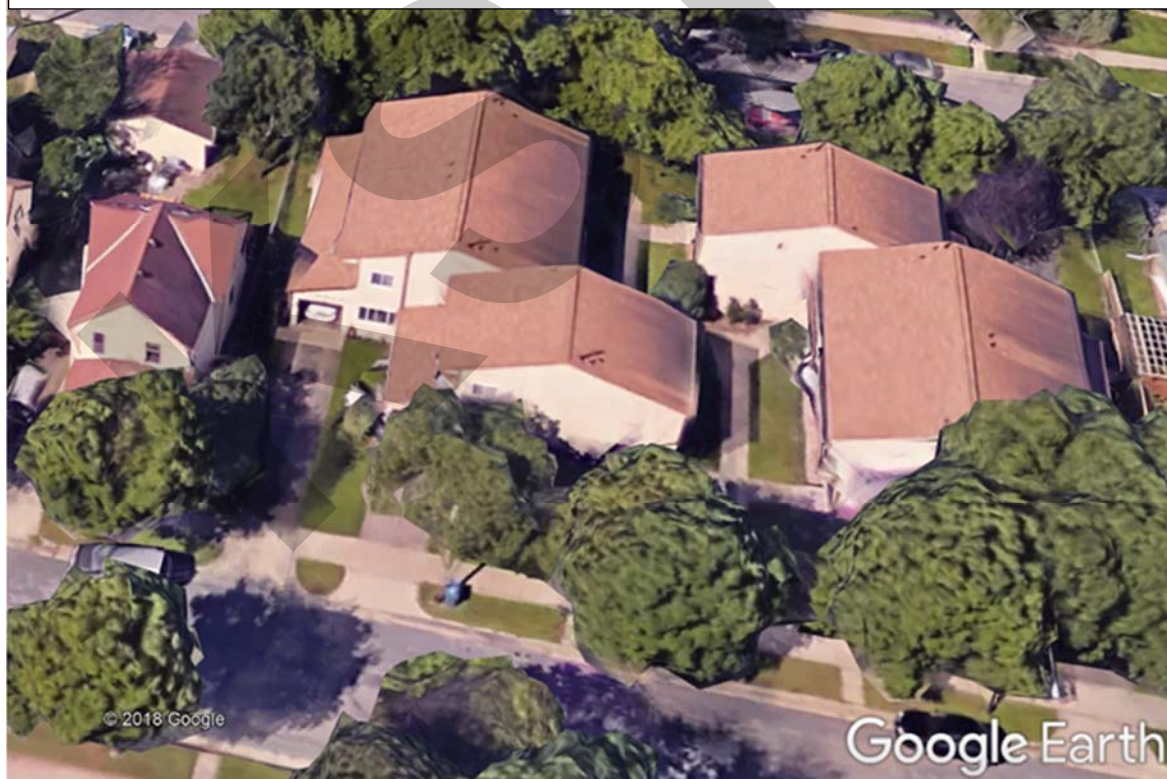
Corridor 4: no maximum density assigned, building heights 1-4 stories (requests to exceed 4 stories evaluated on a case by case basis), variety of building types on both small and moderate sized lots, combining lots allowed. The expected density is 31.91 du/acre.

Corridor 6: no maximum density assigned, building heights 2-10 stories, (requests to exceed 4 stories evaluated on a case by case basis) variety of building types on moderate to large lots. Expected density is 36.09 du/acre.

Figure 5 illustrates visually the difference even a small magnitude of increased density change causes. The lot on the left represents a typical low density single family parcel with a density of approximately 7 du/acre. The two buildings on the right represent a combining of three lots with six dwelling units, resulting in a doubling of density to approximately 14 du/acre. An increase in density of all R1/R1A lots from 7 du/acre to 21 du/acre is permitted in the 2040 Plan, resulting in a greater density change than illustrated on the figure below.

Impacts related to an increase in density can include noise, increased pedestrian and vehicle traffic, parking constraints, and increased stormwater runoff. Increased density can also result from increases to allowed building height or floor area.

Figure 5 Visualizing Increased Density



3.3.2 Intensification of use:

Land use impacts may occur when zoning changes allow different activities and functions to take place on a given parcel or site. Changing the uses allowed in an area can have a negative land use impact when new activities conflict with established functions.

Intensification of use will occur in areas where existing low density residential zoning is reguiged to allow commercial land use activities.

Low density residential uses converted to corridor mixed use, or goods and services, which encourage the expansion of commercial zoning and mixed multi use multi-story development, will be subject to an intensification of use.

For example, over 800 parcels (112 acres) of low density land use (existing R1/R1A) will be converted to Corridor Mixed Use in the 2040 Plan.

Environmental Impacts associated with intensification of use may include:

1. Increased noise impacts;
2. Increased pedestrian traffic;
3. Increased vehicle traffic and congestion;
4. Increased congestion and idling;
5. Decreased air quality;
6. Increased parking constraints;
7. Longer hours of activity;
8. Increased light and glare from buildings; and
9. Increased stormwater runoff.

3.3.3 Intensification of scale:

The 2040 Plan states:

“The Built Form Map guides the scale of development for every parcel in the city through Built Form Districts. The built form of all new and remodeled buildings must be consistent with the guidance of the Built Form Map.”⁹

Land use impacts may occur from increasing the scale of buildings that can be built in an area.

Land use changes that increase maximum height or floor area ratio (FAR) limits or modify required setbacks can result in scale changes that create land use impacts.

⁹Draft 2040 Plan not dated released online fall 2018. Maps: Future Land Use and Built Form. Page 55.

The 2040 Plan lacks specific standards (e.g. setbacks, impervious area, floor area ratios) other than number of permissible building stories for the individual built form categories.

The most significant adverse impacts occur with the greatest incremental changes.

Intensification of scale occurs with a significant change in building heights. For example, an increase in the permitted height of residential buildings from 2.5 stories to 3, 4 or 6 stories occurs on existing low density residential parcels now included in the Corridor 3, Corridor 4 or Corridor 6 Built Form Districts. Over 8,000 low density residential parcels (over 1,000 acres) will be within the Corridor 3, Corridor 4, or Corridor 6 Built Form Districts. Building scale will also intensify within the transit zone built form districts.

Intensification of scale also occurs with a significant change in building footprint. This type of intensification of scale will occur across much of the City, but the most significant impacts are to the approximately 15,000 existing low density residential parcels (2,000 acres) that will be included in the Interior 3, Corridor 3, Corridor 4, or Corridor 6 Built Form Districts, where combining lots is allowed and/or encouraged, therefore supporting larger building footprints within the combined lots.

3.3.4 2040 Appendixes

2040 Plan includes Appendix B – Land Use. This appendix includes information that is necessary to satisfy the Metropolitan Council requirements related to land use.

Appendix B contains forecasted population, household and employment data, existing land use map and table, future land use table in 10-year stages, expected growth density for future land use categories and built form categories, maps of changes in commercial and production land use areas. There is only very limited text in the Appendix associated with the tables and the text indicates that it is not inconsistent with the policies of the plan to build residential densities a greater than those identified in the tables.

Analysis in Appendix B is limited to demonstrating that the 2040 Plan meets existing and projected land use needs. The November 26, 2018 Plan Amendments proposed by the Council¹⁰ indicate that some areas of the city may grow dramatically. Appendix B does not provide any discussion or identification of land use impacts associated with dramatic growth. Without first identifying impacts, meaningful mitigation cannot and has not been developed.

The 2040 Plan indicates that the City of Minneapolis will update its Zoning Code and Zoning Map to reflect the guidance of the Future Land Use and Built Form Maps after adoption of

¹⁰ CPC Amendments Packet #3 amendments proposed by councilmembers for consideration at the November 26, 2018 Committee of the Whole meeting. Policy 23 Narrative. Retrieved online at [https://lms.minneapolismn.gov/Download/File/1871/Minneapolis%202040%20Committee%20of%20the%20Whole%20Amendments%20\(Nov%2026%202018\).pdf](https://lms.minneapolismn.gov/Download/File/1871/Minneapolis%202040%20Committee%20of%20the%20Whole%20Amendments%20(Nov%2026%202018).pdf)

the plan. Height, bulk and setback standards will work in concert with and be informed by the maps and policies of the plan. This essentially confirms that future regulations will be developed to support the impacts described above, not to mitigate them.

4.0 Stormwater and Water Resource Impacts

Water resources are another area of likely environmental impact as a result of the development and redevelopment induced by the 2040 Plan.

Stormwater discharges are generated by stormwater and snowmelt runoff from land and impervious areas such as paved streets, parking lots, and building rooftops. As stormwater flows across the land and impervious surfaces, the runoff often picks up and transports pollutants in quantities that can adversely affect water quality. Increasing the amount of impervious surfaces increases rate of runoff and volume of runoff. Uncontrolled, these increases result in impacts to water quality, increased flooding, and other impacts.

4.1 Summary of Water Resources Issues

1. The 2040 Plan includes a Water Resources Management Plan (WRMP) Dated October 2018 within Appendix F Wastewater.
2. The goal of the WRMP as stated in the plan is to provide a comprehensive description of the City's water resource management programs and projects at the time the report was published¹¹.
3. The WRMP does not include an analysis of environmental impacts to water resources that are likely to result from adoption of the 2040 Plan and does not provide specific mitigation to address likely environmental impacts.
4. The WRMP does not identify or address the increase in hard surface, the increase in rates of runoff, the increase in pollutant loads, the increase in flooding potential, or reduction in capacity issues that are likely to occur as a result of the 2040 Plan.
5. The WRMP acknowledges that many of these issues are not addressed in the 2040 Plan, deferring analysis to some future date or plan and states as follows:

"The City is developing models of the stormwater drain system city-wide that when complete, will be used to assess capacity, discharge rates, and runoff volumes generated in each of the 406 unique stormwater pipeshed areas. These models will be used to identify capacity problems, prioritize flood improvements, and evaluate water quality improvement opportunities."

¹¹ WRMP ES-9

“Once these models are complete, the City will identify the remaining areas of known flooding to determine the need for additional stormwater conveyance capacity or storage capacity.”¹²

6. The City considers the Minnesota Stormwater Manual, prepared by the MPCA, to be the City’s approved design manual for structural stormwater management practices.
7. The MPCA Stormwater Manual describes the changes in the landscape that occur during urbanization as having a profound effect on the movement of water off of the land.
8. Many of the environmental impacts associated with urbanization originate in the changes in landscape and an increase in impervious area or hard surfaces.
9. Increasing density often results in an increase in hard surface.
10. The 2040 Plan results in an allowed increase in density, which in turn results in the increased hard surface on the majority of existing low density parcels which undergo development or redevelopment consistent with the 2040 Plan.
11. The 2040 Plan does not establish new design standards such as setbacks, percent hard surface, or floor area ratios that will be necessary to achieve the required development or redevelopment built form districts.
12. Increasing hard surfaces without proper mitigation will likely result in:
 - Increased volume of runoff flowing into local surface waters
 - Increased rate of runoff into local surface waters
 - Increased velocity of runoff into local surface waters
 - Shorter time of concentration
 - Increased pollutant loads to local surface waters
 - Reduced groundwater recharge
 - Increased frequency, severity, and duration of local flooding events
 - Diminished capacity of stormwater drainage systems
13. Impacts to receiving waters without proper mitigation will likely result in:
 - Stream widening and bank erosion
 - Stream down cutting
 - Changes to channel bed due to sedimentation
 - Increases in floodplain elevations
 - Degradation of aquatic structure
 - Reduction in habitat diversity and aquatic biodiversity.

¹² WRMP page 4-27

- Reduced base flows
- Increased stream temperatures

14. City stormwater management regulations do not require volume control, rate control, or permanent water quality treatment for site disturbances of one acre or less.
15. The four watershed districts within the City do not establish volume control, rate control, or water quality parameters for redevelopment of lots under 1 acre in size, with the exception of Shingle Creek which requires volume control on sites adding more than 0.5 acres of impervious area.
16. The majority of current low density parcels are under 0.2 acres. Combining six or seven existing low density residential lots may still yield a lot size of less than one acre.

4.2 Analysis of likely impacts

4.2.1 Increased Hard Surfaces

Consistent with the 2040 Plan, built form districts are intended to guide the scale of development for every parcel in the city, independent of the uses allowed on the site. The 2040 plan states that

“The built form of all new and remodeled buildings must be consistent with the guidance of the Built Form Map.”

Parcels currently zoned low density residential, were reviewed to determine what built form district would guide their future development or redevelopment. The number of lots and area within each built form district was calculated. The increase in hard surface area was determined for each built form district. Table 7 indicates the percent hard surface assumed for each Built Form District used in modelling likely impacts.

Table 7 - Average Percent Impervious Assumed in Analysis							
District	R1/R1 A	Interior 1	Interior 2	Interior 3	Corridor 3	Corridor 4	Corridor 6
Average % Impervious	50	60	65	70	85	85	85
% Increase in Hard Surface Area %		10	15	20	35	35	35

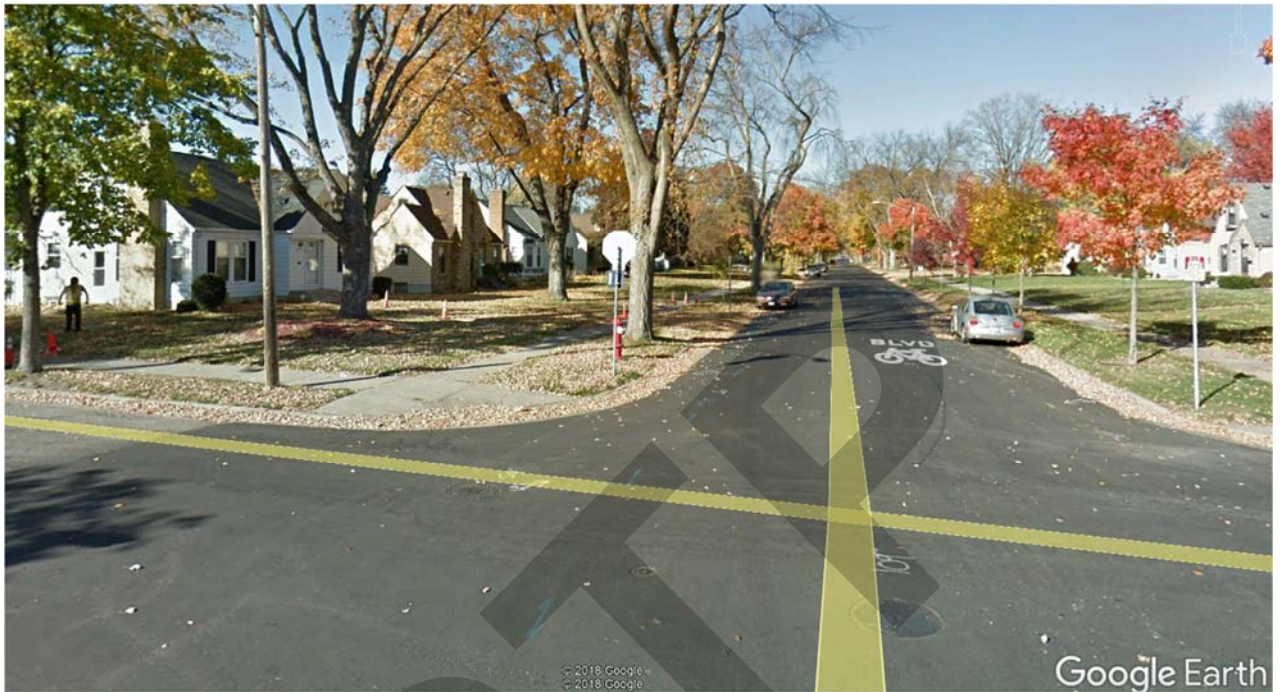
An assumption of impervious area for each built form district was necessary because the 2040 Plan does not include specific building criteria (e.g. setbacks, impervious area) other than number of stories associated with each built form district and the visual renderings presented with each description of the various built form districts.

To help visualize how each built form district will result in an increase in hard surface from the existing conditions, a series of viewsheds from existing R1 and R1A Districts that are within the future Interior 1, Interior 2, Interior 3, Corridor 4, and Corridor 6 Built Form Districts are compared to each of the corresponding built form districts. Built form districts are represented using the conceptual rendering of the built form district provided in the 2040 Plan (Figures 6-10). The area of hard surface on existing R1 and R1A lots was modelled as an average of 50% based on model development guidance included in the 2006 Minneapolis Local Surface Water Management Plan.¹³

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¹³ City of Minneapolis, Local Surface Water Management Plan, Appendix M, October 1, 2006

Figure 6
Interior 1 Impervious Surface Comparison

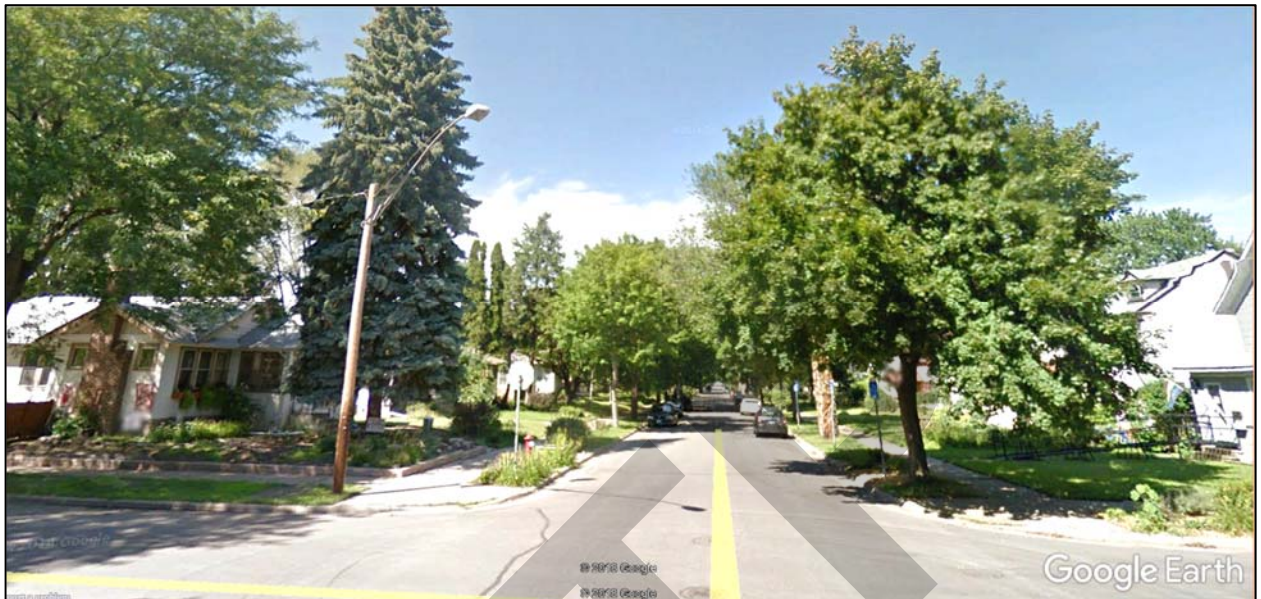


Existing: Looking north from intersection of 12th Avenue South and East 58th Street. Current Zoning R1. Proposed Built Form Interior 1.



Proposed: Interior 1 Built Form (from 2040 Plan)

Figure 7
Interior 2 Impervious Surface Comparison



Existing: Looking north from Intersection of 33rd Street East and 38th Avenue South. Current Zoning R1A. Proposed Built Form Interior 2.



Proposed: Interior 2 Built Form (from 2040 Plan)

Figure 8
Interior 3 Impervious Surface Comparison



Existing: Looking north from intersection of 31st Street E and 38th Avenue South. Current Zoning R1A. Proposed Built Form Interior 3



Proposed: Interior 3 Built Form (from 2040 Plan)

Figure 9
Corridor 4 Impervious Surface Comparison



Looking North from the intersection of W 53rd St and Xerxes Ave S. Current Zoning R1A.
Proposed Built Form Corridor 4



Proposed: Corridor 4 Built Form (from 2040 Plan)

Figure 10
Corridor 6 Impervious Surface Comparison



Existing: Looking east along E 46th Street from 42nd Ave S. towards S 43rd Ave. S. Current Zoning R1A. Proposed Built Form Corridor 6.



Proposed: Corridor 6 Built Form (from 2040 Plan)

Analysis of the cumulative impact of increased hard surface area is important in understanding likely environmental effects to downstream stormsewer systems and surface waters because current stormwater regulations, including the Stormwater Ordinance, the Stormwater and Sanitary Sewer Guide,¹⁴ and the applicable watershed district regulations within the city do not regulate peak flow rates or impose water quality treatment criteria for sites under one acre in size.¹⁵ Current stormwater regulations including the Stormwater Ordinance, the Stormwater and Sanitary Sewer Guide¹⁶ and the applicable watershed district regulations within the city also do not regulate volume control for sites under one acre in size, except, the Shingle Creek Watershed Management Commission regulates volume control for non-detached single family home projects on sites greater than 0.5 acres.

The size of existing low density lots typically range from 0.13-0.15 acres, well below the threshold for regulatory control. This means redevelopment activity on the existing low density residential parcels (over 11,700 acres) will be under the regulatory threshold. This is true even when combining seven or eight individual parcels to form a moderate sized parcel consistent with the Corridor 3, Corridor 4, and Corridor 6 Built Form District guidance. The resulting unregulated increases in contaminant load, flow rates, and volumes are likely to cause adverse environmental impacts to the existing storm sewer system and to downstream water resources.

4.2.2 Increased Contaminant Load

Increased hard surface results in an increase in the amount of stormwater contaminants that are carried off of a site and into the storm sewer system. A model was conducted of the predicted contaminant load resulting from the increase in impervious area associated with redevelopment consistent with the City's built form districts.

A P8 model was run to estimate the increase in contaminant load on an annual basis. P8 is a model used for predicting the generation and transport of stormwater runoff pollutants in urban watersheds. Continuous water-balance and mass-balance calculations are performed using rainfall data. The model is used by engineers and planners in designing and evaluating runoff treatment schemes for existing or proposed urban developments. In this case, the model was used to estimate the increase in annual average contaminant load to assess the cumulative water quality impacts. Table 8 includes the results of the P8 analysis.

¹⁴ City of Minneapolis Stormwater and Sanitary Sewer Guide. Sewer and Developed by Minneapolis Public Works Surface Water Sewers Division October 2017

¹⁵ They do require soil erosion control plans that protect stormwater runoff during construction activity when site soils are disturbed.

¹⁶ City of Minneapolis Stormwater and Sanitary Sewer Guide. Sewer and Developed by Minneapolis Public Works Surface Water Sewers Division October 2017

Table 8 - Annual Increased Contaminant Load to Storm Sewer System from redevelopment of R1/R1A parcels consistent with 2040 Plan			
Contaminant	Existing (pounds per year)	2040 Plan Buildout (pounds per year)	Increase (pounds per year)
Total Suspended Solids (TSS)	279,294	498,661	219,367
Total Phosphorous (TP)	1,107	1,835	728
Total Nitrogen (TKN)	5,315	8,628	3,313
Copper	158	263	105
Lead	60	104	44
Zinc	567	920	353
Hydrocarbons	7,451	12,945	5,494

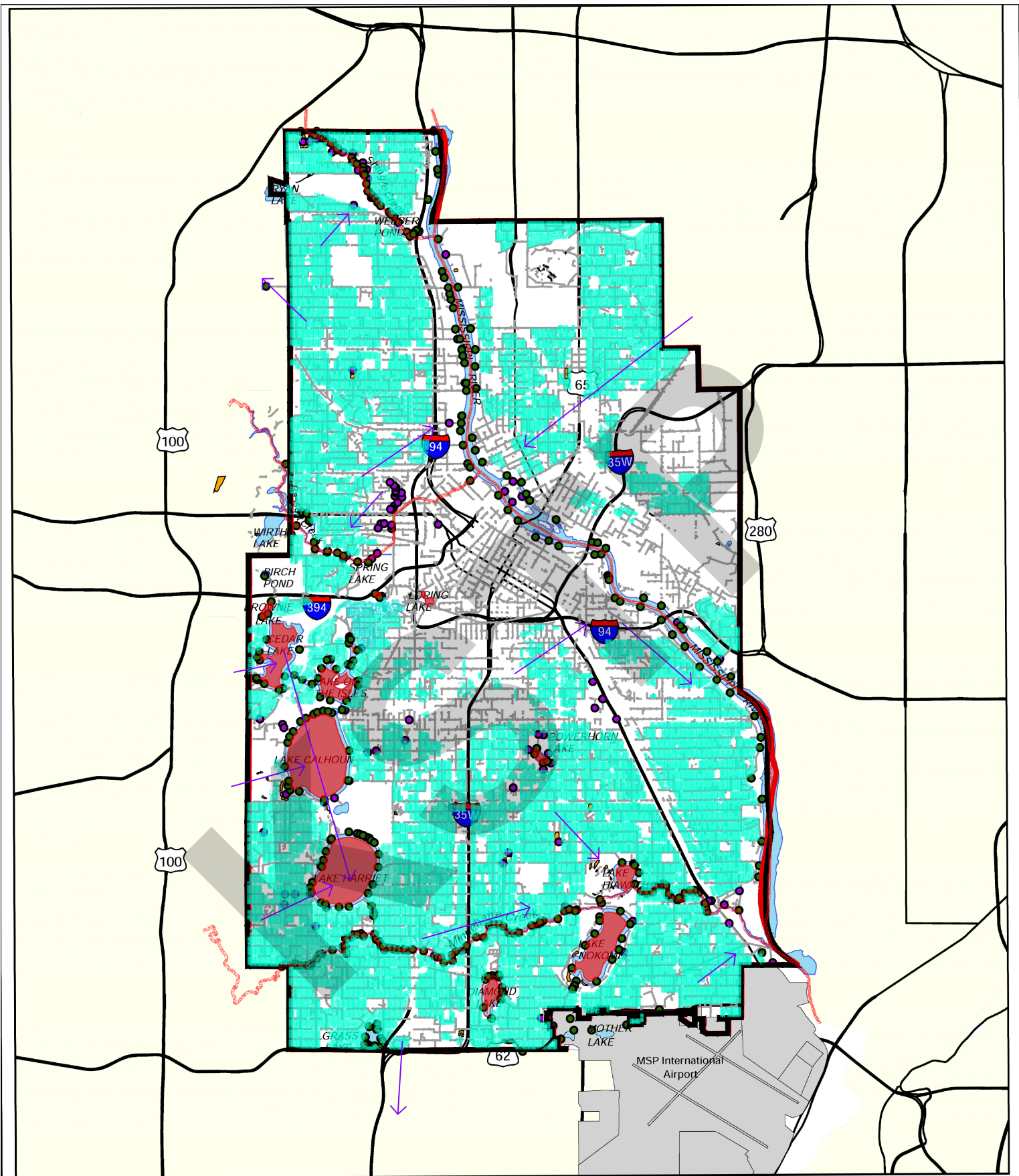
This analysis was limited to the existing R1/R1A single family parcels (conservatively estimated at 8,300 acres) that will be guided to one of the six built form districts discussed above. Increases in contaminant load will also be generated from hard surface increases in the low density R2/R2B parcels (approximately 2,800 acres) as well but, but these areas were not modelled. Therefore, the results indicated on Table 8 are only a portion of the total increase in contaminant load that can be expected under full build out conditions of the 2040 Plan. Even without full build out, those areas of the city that experience the greatest growth will contribute the most to the contaminant load to nearby receiving waters.

According to information contained in Appendix F of the 2040 Plan, the existing storm sewer system has 419 outfalls that discharge into 22 lakes, four streams and the Mississippi River. Some of these waterbodies are listed by the Minnesota Pollution Control Agency as impaired waters, meaning they already have compromised water quality. The additional contaminant load resulting from the increased density and hard surface area of lots less than one acre in size will add to stress from pollutants such as nutrients, bacteria, and suspended solids on receiving waterbodies within these watersheds.

Figure 11, Increased Contaminant Load to Impaired Waters, illustrates a map of the existing storm sewer outfall locations, impaired waters and the current extent of low density residential lots that are in the future Interior 1, Interior 2, Interior 3, Corridor 3, Corridor 4, and Corridor 6 Built Form Districts. This figure illustrates the widespread nature of the impact, the connection between increased contaminant loads and the city's stormsewer system, and the receiving surface water resources that will receive the increased contaminant load.

4.2.3 Increased Volume of Runoff

Increased hard surface (impervious area) also results in less stormwater being able to soak into the ground and more stormwater running off of a site into the streets and storm sewer system. Increased hard surface results in an increase in the volume of stormwater leaving a site and entering the storm sewer system as well as the rate at which it flows from the site.



Basemap from Minneapolis 2030 Appendix E Sewer Plan

Figure 11
Increased Contaminant Load to
Impaired Waters

- Low Density Residential Lot with I1, I2, I3, C4, or C6 2040 Built Form Designation
- MPCA 2018 Proposed Impaired Water
- Pipeshed Flow path

- City Storm Sewer
- Highways
- Grit Chambers
- Outfalls
- Stormwater Basins

Exhibit 1

A HydroCAD model was developed to estimate the increase in volume and rate of runoff resulting from development consistent with full buildout of the 2040 Plan. The model was run for one acre sites within each built form category to estimate the increase in rate and volume of runoff on a per acre basis. The results were compared to existing condition to determine the percent of increase. The results can be multiplied by the number of acres within each built form category to estimate the cumulative impact across the over 8,000 acres of R1/R1A parcels that will be guided by one of these 6 built form districts. The model results for the increase in rate of runoff are illustrated on Table 9.

Table 9 - Increase in Rate of Stormwater Runoff from R1/R1A Parcels to Future Built Form Districts						
Event	Interior 1	Interior 2	Interior 3	Corridor 3	Corridor 4	Corridor 6
	Increase	Increase	Increase	Increase	Increase	Increase
2-YR	16%	24%	31%	109%	109%	109%
10-YR	9%	13%	18%	75%	75%	75%
100-YR	3%	4%	5%	44%	44%	44%

Table 10 - Volume of Stormwater Runoff Existing R1/R1A v. Future Built Form Districts (cubic feet per acre)							
Event	Existing	Interior 1	Interior 2	Interior 3	Corridor 3	Corridor 4	Corridor 6
2-YR	3,883	4,375	4,620	4,867	7,506	7,506	7,506
10-YR	6,893	7,471	7,759	8,050	11,853	11,853	11,853
100-YR	15,156	15,710	15,983	16,263	22,467	22,467	22,467

The results show that the increase in rate of runoff and volume of runoff is greatest for low intensity, higher frequency events. This is because for larger rainstorm events, the soils in permeable areas become saturated and do not infiltrate water as readily.

The results also show that built form districts with higher densities will experience the greatest increases in the volume of runoff. For example, Figure 12 depicts the modelled increase in the volume runoff as a result of increased hard surface for 600 acres of existing single family lots redeveloping in the future to Corridor 3, 4, and 6 Built Form districts.

Figure 12 Volume of Runoff
2 YR-24 HR Rainstorm Event
Existing Single family to Corridor 3, 4, and 6 Built Forms



The increased volume of runoff will occur throughout the existing low density residential district. Runoff will flow to the existing stormwater sewer system. Increased rate and volume of runoff entering the system can result in increased flooding and stormsewer capacity issues. Appendix F of the 2040 Plan indicates that the primary function of the stormwater

drain system is to convey the peak flows generated by storm events and to prevent damage to infrastructure, private properties, natural systems, and receiving waters. Appendix F indicates that the city has not assessed the capacity, discharge rates, or runoff volumes generated in each of the areas served by the city's storm sewer system.

Appendix F of the 2040 Plan indicates that the design criteria of some older portions of the existing storm sewer system was the 2 or 5 yr storm event with 1 to 24 hours in duration. Current design criteria is the 10 yr-24 hour storm event. Segments of the system that were designed under previous standards will be more susceptible to flooding. Table 10, taken from information in the 2030 Comprehensive Plan, illustrates that a significant portion of the city's stormsewer system was built before the 1960's.

Table 10 Excerpt from 2030 Plan	
Table 4-3. Storm Drainage	
Year Built	% of Storm Sewer System by Length
Pre-1900	0.1%
1901 - 1910	0.3%
1911 - 1920	0.5%
1921 - 1930	2.7%
1931 - 1940	27.0%
1941 - 1950	7.5%
1951 - 1960	8.8%
1961 - 1970	16.8%
1971 - 1980	17.1%
1981 - 1990	14.3%
1991 - 2000	4.7%
2001 - 2006	0.1%

The 2040 Plan has not evaluated capacity, discharge rates, and runoff volumes associated with the land use changes contemplated in the plan or the impacts of the increase in volume of runoff and contaminant loads on downstream water resources, some of which are currently impaired. The current stormwater management regulations, which apply to sites greater than one acre in size, do not regulate these increases.

Increased volume of runoff associated with the future built form districts will negatively impact the severity of existing flooding problems and may induce flooding in segments of the system that are currently near capacity.

The 2040 Plan does not identify areas of the city that currently experience flooding or that would be prone to flooding with increases in stormwater rates of runoff or volume of runoff.

The plan indicates that currently “segments of the system have insufficient capacity and experience pressurization and /or surface floods during relatively small rainfall events.”

The 2030 Plan included a map that identifies areas of the city with flooding issues at the time the 2030 Plan was prepared (Figure 13). Some of these areas may have been rectified with public improvement projects, but the 2040 Plan indicates that some flood prone areas still exist.

Many water resources within the city are currently listed as impaired waters. Because of increased development, the waterbodies within the watersheds of these resources will continue to experience stress from pollutants such as nutrients, bacteria, and suspended solids.

Likely impacts include:

1. Increased volume of runoff flowing into local surface waters
2. Increased rate of runoff into local surface waters
3. Increased velocity of runoff into local surface waters
4. Increased pollutant loads to local surface waters
5. Reduced groundwater recharge
6. Increased frequency, severity, and duration of local flooding events
7. Diminished capacity of stormwater drainage systems

4.2.4 2040 Plan Appendixes

The 2040 Plan includes Appendix A – Mississippi River Corridor Critical Area Plan, Appendix E Resources and Resilience, and Appendix F Wastewater.

The Mississippi River Corridor Critical Area (MRCCA) is a specially designated area adjacent to the Mississippi River protected by state regulation that extends beyond the city of Minneapolis to the north and to the south. The MRCCA contains many significant natural and cultural resources, including: scenic views, water, navigational capabilities, geology and soils, vegetation, minerals, flora and fauna, cultural and historic resources and land and water based recreational resources. The MRCCA is governed by special land planning requirements and land development regulations. These regulations, which are implemented through local MRCCA plans and ordinances, have been developed to protect and preserve the natural, scenic, recreational, and transportation resources along the designated section of the Mississippi River.

The MRCCA Plan included as Appendix A generally adopts the minimum development standards and criteria provided for in Minn. Rules Chapter 6106, which were established by the Minnesota Department of Natural Resources (MDNR). The MRCCA plan contains specific development requirements relating to height restrictions, structure tiering, structure setbacks as well standards for conditional use permits to increase height limits.

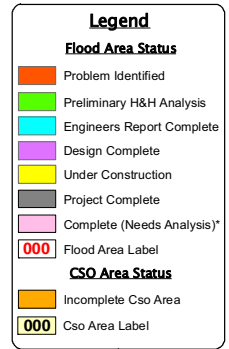
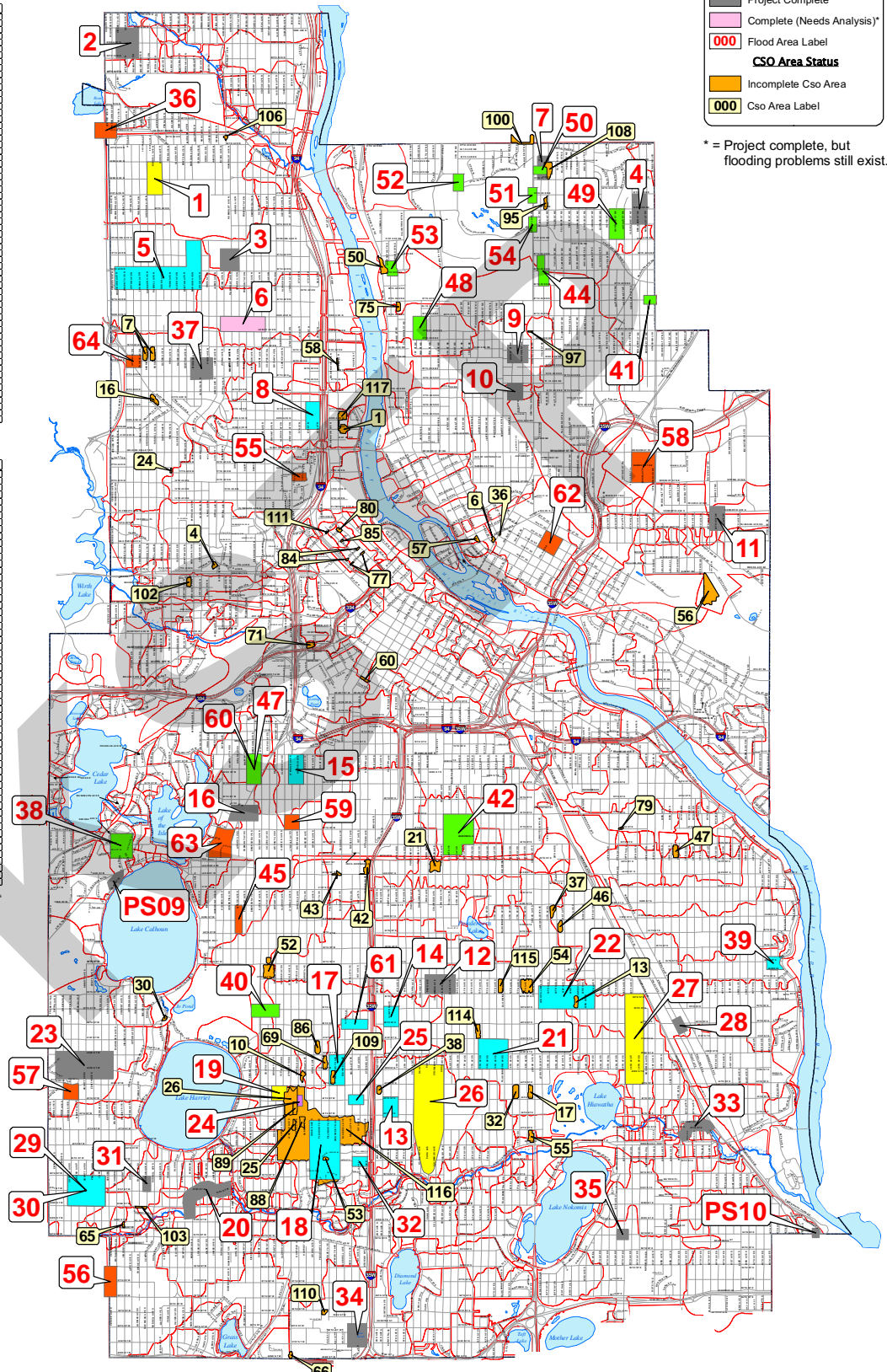
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FIGURE 13

From Minneapolis 2030 Appendix E

The MRCCA plan specifically addresses the built form districts within the MRCCA. Where the built form guidance guides for a height greater than the Critical Area districts, the Critical Area regulations apply. Where the Critical Area districts allow for a conditional use permit to increase height, the built form category provides additional guidance on appropriate building height.



Figure 14 MRCCA

The plan also addresses other environmental topics including native plant communities, cultural and historical properties including land marks, historic places, historic districts, viewsheds, gorges, unstable soils and bedrock, bank and slopes restoration priorities, erosion prevention, bank and slope stabilization, open space and recreational facilities. The MRCCA plan identifies environmentally sensitive resources and establishes specific criteria to minimize impacts to the river that could occur during development. The MRCCA Plan accomplishes the task of identifying likely environmental impacts and addressing them through specific mitigation measures and design standards.

The MCRRRA plan is only relevant to the MCRAA and does not include the majority of the City of Minneapolis or the water resources within. Figure 14 illustrates the extent of the MRCCA within Minneapolis.¹⁷

Appendix E Resources and Resilience indicates that it provides supporting content for resilience, natural resources, and special resource protection. The Appendix is 10 pages long and addresses solar resource development. It does not include any discussion regarding how the 2040 Plan could impact solar resources or existing solar systems (for example due to increased building heights) or possible mitigation.

Appendix F Wastewater includes supporting content for wastewater related policies and satisfies the Metropolitan Council requirements related to wastewater, but it does not include any type of analysis to identify likely impacts related to or resulting from induced development permitted in the 2040 Plan.

¹⁷ <https://www.knowtheflow.us/2013/12/rules-for-the-mississippi-river-corridor-critical-area/>

With respect to stormwater, the appendix includes discussions and links to City's stormwater management plan regulations, and watershed district regulations. The plan does not evaluate capacity, discharge rates, and runoff volumes associated with the land use changes contemplated in the plan or the impacts of the increase in volume of runoff and contaminant loads on downstream water resources, some of which are currently impaired. The plan does not address downstream impacts to surface water resources that are likely to occur under the current regulations which apply for the most part to only to sites greater than one acre in size, or areas within the MRCCA.

The appendix notes that certain areas of the city are currently subject to stormwater capacity issue. It does not address how the increased stormwater volumes will impact flooding. The plan includes a stormwater catchment inventory and describes the current impervious surface data based on existing land use and receiving waters. The inventory does not include an assessment of the changes to the system that will result from the increased density associated with the new land use categories and built form districts within the pipesheds and receiving water bodies.

The Appendix F in general describes the need to balance multiple important water resource issues and concerns including aging infrastructure, management of flooding, and management of quantity and quality stormwater runoff as current trends in water resources management, but does not analyze the repercussions of the implementation of the 2040 Plan on water resources or the storm sewer infrastructure. It does not identify areas that will require mitigation to address those impacts or specific steps that could be taken to reduce or minimize impacts. Appendix F includes capital improvement projects to complete Environmental Protection Agency Requirements for stormwater quality improvements. These are projects resulting from existing water quality and impaired waters issues and do not consider the additional impacts resulting from the 2040 Plan.

Policy 71 of the 2040 Plan includes "reduce impervious cover" as an action step in protecting and improving soil health. There is no discussion in the 2040 Plan or Appendixes on how this action step can be implemented or the inherent conflict between this action step and the requirement that each new development and redevelopment must meet the new built form guidance, which results in increased impervious surface as illustrated in Figures 6-10.

5.0 Traffic Impacts

The widespread land use changes inherent in the 2040 Plan represent likely significant traffic impacts. Impacts may include:

- roadway and intersection capacity issues;
- pedestrian, bicycle, and vehicle safety conflicts;
- parking issues; and
- congestion and related air quality impacts.

The 2040 Plan does not include a transportation analysis that evaluates the impacts of implementing the range of land use alternatives identified in the 2040 Plan. It does not identify, analyze, or provide specific mitigation of transportation-related impacts. Appendix D Transportation, of the 2040 Plan largely defers transportation related analysis and strategies to a future update to the Transportation Action Plan.

While a transportation impact analysis is beyond the scope of this report, the question of how much more traffic could be generated because of the 2040 Plan to allow increased density throughout the existing single family residential area can be addressed. The permitted density in these areas would increase from one to two dwelling units per parcel to three to four or more dwelling units per acre depending upon the built form district.

A first step is to estimate the number of vehicle trips that may result over the area under both existing conditions and future conditions resulting from the increased number dwelling units permitted under the 2040 Plan. Vehicle trip generation is commonly estimated using rates published by the Institute of Transportation Engineers (ITE) based on land use classifications. The current 10th edition of ITE's Trip Generation Manual categorizes single family, low-rise multifamily containing one to two floors, and mid-rise multifamily containing three to ten floors. Daily trip generation per dwelling unit range from 9.44 trips per day for single family, 7.32 vehicle trips per day for low-rise multifamily to 5.44 vehicle trips per day for mid-rise multifamily land use.¹⁸

The ITE trip generation rates do not account for a generally recognized reduction in the number of vehicle trips per day in smart growth areas due to the presence of transit, bike and pedestrian friendly facilities. Currently there is debate regarding the appropriate methods for estimating vehicle trip-generation rates associated with smart-growth projects. A number of contributing factors other than land use play a role. A limited review of research literature indicates a wide variation in trip generation rates. For the purpose this general analysis a reduction of 25% of the ITE rates was utilized.

The adjustment factor was taken for the existing low density land uses because they are served by the same transportation, bike and transit facilities as the future land use designations. Table 11 identifies the potential number of new trips generated from permitted new dwelling units on existing single family residential parcels under full buildout of the 2040 Plan within the Interior 1, Interior 2, and Interior 3 built form districts. The calculation estimates that tripling the density on single family parcels will have the effect of approximately doubling the average daily trips. An increase of over 500,000 daily vehicle trips is estimated from the Interior 1, 2 and 3 districts under full build out conditions.

With increased vehicle trips generated in areas that were designed to accommodate lower densities, and therefore fewer vehicle trips per day, traffic infrastructure may be under

¹⁸ Spack Consulting, Trip Generation Multifamily Housing and Land Use, 10/24/2018. Retrieved digitally at <https://www.mobotrex.com/2018/05/01/trip-generation-review-multifamily-housing-land-use/>

designed, level of service at certain intersections may suffer, and pedestrian, bicycle and vehicle conflicts may impact safety. Table 11 includes the existing and potential daily traffic generation in the Interior 1 Interior 2 and Interior 3 Districts as result of full buildout of the 2040 Plan.

Table 11 - Potential new daily vehicle trips Interior 1, Interior 2, and Interior 3 Built Form Districts							
	Parcels	du/parcel	du	Trip Generation Land Use Category	Rate of Trips/du ^c	Adjusted trips/du ^d (25% reduction)	Total Trips per day
Existing							
R1/R1A	56,400	1	56,400	single family	9.44	7.08	399,312
Total							399,312
2040 Plan							
Interior 1	36,000	3	108,000	multifamily low rise	7.32	5.49	592,920
Interior 2	19,000	3 ^a	57,000	multifamily low rise	7.32	5.49	312,930
Interior 3	1,400	3 ^b	4,200	multifamily mid rise	5.44	4.08	17,136
Total							922,986

^a up to 4 on larger lots

^b higher density allowed

^c ITE Trip Generation 10th, Ed.

^d 25% reduction for smart growth

Development and redevelopment with increased residential unit density will generate additional vehicle trips locally. Increased density in certain areas may concentrate trip origins and trip destinations which can increase congestion in specific areas.

Limited parking opportunities can further contribute to congestion in certain areas. One of the specific action steps in the 2040 Plan is to eliminate requirements for off street parking minimums in order to promote the plan's goals that prioritizes walking first, followed by bicycling and transit use, and lastly motor vehicle use.¹⁹ There has not been an intermodal transportation analysis study to determine the likely impacts of this policy.

5.1 2040 Plan Appendices:

Appendix D Transportation includes information required to satisfy the Metropolitan Council requirements related to transportation. The appendix includes household employment and population projections for individual transportation analysis zones, and a description of the existing transportation systems. The plan discusses a future transportation action plan that will update the use and design of public right of way right of way, different transit market areas within the city.

¹⁹ 2040 Plan p. 116 October 2018 Draft

Appendix D does not include any type of traffic impact analysis or evaluation of the transportation related impacts that are likely to occur as a result of the land use changes included in the 2040 Plan. The appendix does not address the ability of the local system which was designed and constructed to serve predominantly low density residential development over thousands of acres to now accommodate future traffic demands likely marked by localized areas of dramatic growth. The appendix does not address the repercussions of the plan on congestion at key intersection in the city, the impacts of removing off street parking requirements, or pedestrian, bicycle vehicle conflicts resulting from the densification of certain areas of the city.

6.0 Conclusion

The 2040 Plan establishes a dramatic shift in land use policy with a general city wide increase in permitted density. Proposed changes in land use consistent with the 2040 Plan inherently result in a physical manipulation and impact of the environment, as well as existing infrastructure that was implemented based on entirely different design criteria.

The 2040 Plan focusses on polity and goals and has largely ignored the identification of environmental impacts that are likely to occur as a result of the plan. Without analysis and the identification of the impacts, the plan lacks the development of any specific criteria or mitigation steps necessary to reduce or minimize impacts resulting in likely pollution and harmful effects to natural resources. A review of some environmental topics was provided to illustrate the magnitude of impacts to the air, water, and other natural resources which are likely to occur, but has not attempted to address all areas of concern or provide the detailed analysis required of thorough environmental review.

Other topics of potential environmental impacts include those areas routinely included as part of environmental review or impact assessment; such as changes in cover type (impacts to greenspace), ecological resources, and air quality. The 2040 Plan lacks an analysis of the plan's impact on the environmental, identification of impacts, and specific design criteria or measures which could mitigate likely impacts.

Attachment 1
New unit calculations

KSTP

BASED ON ACRES IN EACH TEN YEAR INCREMENT																
Average Growth Density																
		Typical Density Range	Average Planned Density	Existing	2020				2030				2040			Total
		du/acre	du/acre	acres	increase				increase				increase			new du
					acres	acres	acres	du	acres	acres	du	acres	acres	du		Total Acres
Urban Neighborhood		8-40	24	13,672	13,822	150	3,600	13,972	150	3,600	14,095	123	2,952	10,152	423	
Neighborhood Mixed Use		8-40	24	153	167	14	336	180	13	312	207	27	648	1,296	54	
Corridor Mixed Use		8-75	42	762	828	66	2,739	894	66	2,739	959	65	2,698	8,176	197	
Community Mixed Use		12-125	69	573	623	50	3,425	672	49	3,357	692	20	1,370	8,152	119	
Destination Mixed Use		75-150	23	230	250	20	450	270	20	450	620	350	7,875	8,775	390	
Production Mixed Use		15-25	40	526	577	51	2,040	627	50	2,000	678	51	2,040	6,080	152	
Total							12,590.00			12,457.50			17,582.50	42,630		
Maximum Growth Density																
		Typical Density Range	Maximum Planned Density	Existing	2020				2030				2040			Total
		du/acre	du/acre	acres	increase				increase				increase			new du
					acres	acres	acres	du	acres	acres	du	acres	acres	du		Total Acres
Urban Neighborhood		8-40	40	13,672	13,822	150	6,000	13,972	150	6,000	14,095	123	4,920	16,920	423	
Neighborhood Mixed Use		8-40	40	153	167	14	560	180	13	520	207	27	1,080	2,160	54	
Corridor Mixed Use		8-75	75	762	828	66	4,950	894	66	4,950	959	65	4,875	14,775	197	
Community Mixed Use		12-125	125	573	623	50	6,250	672	49	6,125	692	20	2,500	14,875	119	
Destination Mixed Use		75-150	150	230	250	20	3,000	270	20	3,000	620	350	52,500	58,500	390	
Production Mixed Use		15-25	25	526	577	51	1,275	627	50	1,250	678	51	1,275	3,800	152	
Total							22,035			21,845			67,150	111,030		
Expected Growth Density																
		Typical Density Range	Expected Growth Density	Existing (2015)	2020				2030				2040			Total
		du/acre	du/acre	acres	increase				increase				increase			new du
					acres	acres	acres	du	acres	acres	du	acres	acres	du		Total Acres
Urban Neighborhood		8-40	37	13,672	13,822	150	5,579	13,972	150	5,579	14,095	123	4,574	15,731	423	
Neighborhood Mixed Use		8-40	29	153	167	14	407	180	13	378	207	27	784	1,568	54	
Corridor Mixed Use		8-75	60	762	828	66	3,954	894	66	3,954	959	65	3,894	11,802	197	
Community Mixed Use		12-125	123	573	623	50	6,126	672	49	6,003	692	20	2,450	14,579	119	
Destination Mixed Use		75-150	136	230	250	20	2,723	270	20	2,723	620	350	47,653	53,099	390	
Production Mixed Use		15-25	24	526	577	51	1,210	627	50	1,186	678	51	1,210	3,605	152	
Total							12,590			12,458			17,583	42,630		
From Table 4-1 Expected Growth Density for Future Land Use Categories New units																
		New Units	DU/Acre				Acres									
		8,163	37.19	Urban Neighborhood			219									
		93	29.04	Neighborhood Mixed Use			3									
		4,525	59.91	Corridor Mixed Use			76									
		18,934	122.51	Community Mixed Use			155									
		6,755	136.15	Destination Mixed Use			50									
		9,454	1,704.74	Public, Office and Institutional			6									
		984	23.72	Production Mixed Use			41									
		48,908	Total New Units													

FUTURE LAND USE

FIGURE 3-1: LAND USE TABLE IN 10-YEAR STAGES.

Planned Land Use Table						
Within Urban Service Area		Typical Density Range (Dwelling Units per Acre)		Acres		
Land Uses Allowing Residential Development		Expected Density Range in Dwelling Units Per Acre		Existing (2015)	2020	2030
				2040		
Urban Neighborhood	8	40	13,672	13,822	13,972	14,095
Neighborhood Office and Services	15	40	64	55	45	36
Neighborhood Mixed Use	8	40	153	167	180	207
Corridor Mixed Use	8	75	762	828	894	959
Community Mixed Use	12	125	573	623	672	692
Destination Mixed Use	75	150	230	250	270	320
Production Mixed Use	15	25	526	577	627	678
Public, Office, and Institutional	8	175	2,140	1,835	1,530	1,245

	Average of typical range in Urban Neighborhood					
Current Zoning District	Acres in UN	Existing permitted density (du/acre)	Current permitted (du)	Future permitted density ² (du/acre)	Future (du)	Potential New Units
R1/R1A	8,500	8.71	74,035	24	204,000	129,965
R2/R2B	2,800	17.42	48,776	24	67,200	18,424
Total	11,300		122,811		271,200	148,389
	Expected growth density URBAN NEIGHBORHOOD					
Current Zoning District	Acres in UN	Existing permitted density (du/acre)	Current permitted (du)	Future permitted density ² (du/acre)	Future (du)	Potential New Units
R1/R1A	8,500	8.71	74,035	37.19	316,115	242,080
R2/R2B	2,800	17.42	48,776	37.19	104,132	55,356
Total	11,300		122,811		420,247	297,436

FUTURE LAND USE

FIGURE 3-1: LAND USE TABLE IN 10-YEAR STAGES.

Planned Land Use Table						
Within Urban Service Area	Typical Density Range (Dwelling Units per Acre)		Acres			
Land Uses Allowing Residential Development	Expected Density Range in Dwelling Units Per Acre		Existing (2015)	2020	2030	2040
Urban Neighborhood	8	40	13,672	13,822	13,972	14,095
Neighborhood Office and Services	15	40	64	55	45	36
Neighborhood Mixed Use	8	40	153	167	180	207
Corridor Mixed Use	8	75	762	828	894	959
Community Mixed Use	12	125	573	623	672	692
Destination Mixed Use	75	150	230	250	270	320
Production Mixed Use	15	25	526	577	627	678
Public, Office, and Institutional	8	175	2,140	1,835	1,530	1,245

DENSITY CALCULATIONS

FIGURE 4-1: EXPECTED GROWTH DENSITY FOR FUTURE LAND USE CATEGORIES

Future Land Use Category	New Units	DU/Acre
Neighborhood Mixed Use	93	29.04
Corridor Mixed Use	4,525	59.91
Community Mixed Use	18,934	122.51
Destination Mixed Use	6,755	136.15
Public, Office, and Institutional	9,454	170.74
Production and Processing	-	0.00
Production Mixed Use	984	23.72
Urban Neighborhood	8,163	37.19

Resume

KSTP

Kirsten A. Pauly, P.E., P.G.

Professional Civil Engineer, Professional Geologist.

Professional Experience:

Sunde Engineering, PLLC

1983–present

Managing partner of Sunde Engineering, PLLC, since 2005. Sunde Engineering is a full service civil and environmental engineering consulting firm located in Bloomington, Minnesota. Our civil and environmental engineering groups provide a full range of engineering design and construction management services for private and public clients.

Over 30 years of experience providing consulting services focused on land use development including residential, commercial and industrial properties. Work involves site planning, site analysis, natural resource inventories, grading, drainage, stormwater management, hydrologic and hydraulic analysis, utility design, and groundwater investigations.

Preparation of detailed hydrologic investigations including analysis of surface and groundwater flows on regional and local scales, establishment of flood elevations, utilization of computer modeling techniques, and preparation of wetland replacement plans.

Prepared, managed, or worked as a team member for environmental review for a variety of projects including Environmental Assessment Worksheets, Environmental Impact Statements, Alternative Urban Areawide Review, and Phase 1 and Phase 2 investigations.

Environmental permitting including Minnesota Pollution Control Agency NPDES permits, (construction and industrial), solid waste permits (landfill, metal recycling, single sort recycling, yard waste composting) Minnesota Department of Natural Resources water appropriations permits, work in shoreland, Minnesota Department of Natural Resources, access, driveway, drainage permits and well as local land use permits. Watershed District permits, County and local permits involving, conditional use, interim use, land use, grading and drainage, soil and erosion control.

Preparation of stormwater pollution prevention plans, Stormwater pollution prevention training educator for on-site training, certified erosion and stormwater management construction site management, spill prevention control and countermeasures plans.

Education: M.S. Civil Engineering, 1990, University of Minnesota
B.A. Geology, 1983, Colorado College

Registration: Registered Professional Engineer, Minnesota and Wisconsin
Registered Professional Geologist, Minnesota



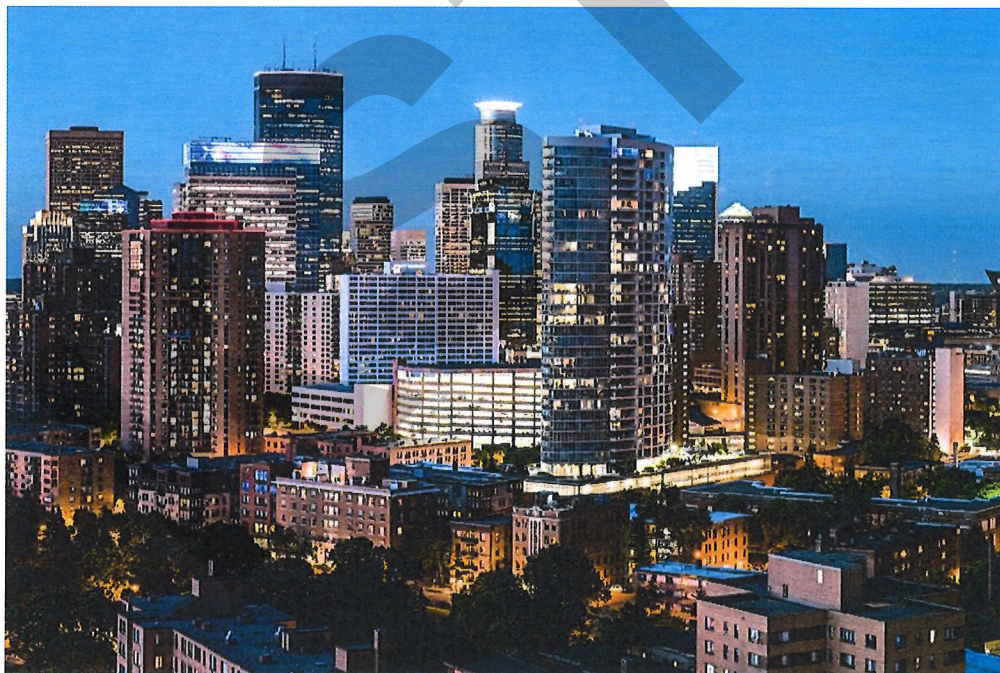
PROPERTY LINES

Can Minneapolis's radical rezoning be a national model?

13

Here's what a plan to tackle climate change, density, and affordability looks like

By **Patrick Sisson** | Nov 27, 2018, 12:45pm EST



The Minneapolis 2040 plan positions the city as one of the few in the U.S. proposing—and likely passing—a large-scale plan to tackle the pressing problems facing American cities. | Shutterstock

Calling the Minneapolis 2040 plan ambitious is an understatement.

The plan, which is expected to pass City Council scrutiny early next month, is the furthest-reaching such proposal from a U.S. municipality, and comes after nearly a year of heated debate. The updated policy would upzone nearly the entire city, which will allow taller buildings with more units to be built in areas that previously only contained single-family homes (at present, more than 75 percent of city residents live in areas that only allow single-family residences or small multifamily housing).

Like the rest of the nation, Minneapolis faces an affordable housing crisis that is expected to get worse. More than half of the city's residents rent, and half of those renters are cost-burdened. The city has added 83,000 households since 2010, while building just 64,000 new homes, and is expected to welcome another 233,000 households by 2040, according to its Metropolitan Council. With Minneapolis 2040, officials hope to head off the housing shortage, all while showing how land-use policy can address critical climate challenges and the city's history of racial inequality.

Combined with a proposed \$40 million investment in programs that support renters and combat homelessness planned for by recently elected Mayor Jacob Frey, the Minneapolis 2040 plan positions the city as one of the few in the U.S. proposing—and likely passing—a large-scale plan to tackle the pressing problems facing American cities.

“Affordable housing is a right,” Frey has tweeted. “Addressing our housing supply—and shortage—is going to be a key part of realizing that right.”

“Freyplexes” and the future of Minneapolis

The Minneapolis 2040 plan was introduced to the public earlier this year, and aims to attack the city's housing shortage by increasing density and constructing new housing.

Updated zoning guidelines proposed in the plan would allow triplexes to be built across much of the city—and allow even denser developments in transit zones. The proposal has been dialed down since it was announced earlier this year; initially, the plan called for allowing fourplexes, or what opponents have called “freyplexes,” everywhere.

Perhaps predictably, the plan has been subject to fierce debate. At dozens of open forums about Minneapolis 2040, neighbors have complained that the upzoning would ruin the character of their neighborhoods. Others say the plan is a giveaway to developers and won’t really lower the cost of producing affordable housing. Some activists and YIMBYs feel it doesn’t go far *enough* in upzoning. The planning office has received more than 11,000 comments.

What all sides of the debate can agree on is the need to tackle the city’s increasing affordable-housing crisis. The problems facing Minneapolis—a rapid increase in the number of new households that hasn’t been met with new housing construction; a [2.2 percent](#) apartment vacancy rate; and a corresponding [rise in homelessness](#)—have exacerbated racial and income inequality.

“I’m only a few rent hikes away from being priced out of the neighborhood that I was elected to serve,” Blue Deliquanti, a renter and representative of the city’s South Uptown Neighborhood Association, told [Minneapolis Public Radio](#). “We’re facing [a] housing and environmental crisis in Minneapolis, and it’s no longer appropriate to fuss over a neighborhood’s character when new residents aren’t able to stick around long enough to build their own character.”

They are problems nearly every city in the United States currently faces. Austin, Texas, and Portland, Oregon, have also examined [large-scale upzoning proposals](#), while in [housing-poor California](#), a widely heralded bill to [mandate transit-oriented development](#) statewide was defeated in the state legislature.

Can Minneapolis be a model for how to break through traditional gridlock when it comes to local limits on the housing supply?



More than 75 percent of Minneapolis residents live in areas zoned for single-family homes. | Shutterstock

How Minneapolis 2040 will, or won't, work

The city's shortage of affordable units isn't due to a dry spell for the city's builders. According to [*Minnesota Public Radio*](#), the city has issued [\\$5 billion in construction permits](#) over the last five years. But much of that has been for luxury developments. Since 2000, the city has actually [lost 15,000 affordable units](#); while 7,000 such units were added over the last two years, overall rents have increased 15 percent.

Minneapolis 2040 believes the solution is simply more: more construction, more high-rises, and more triplexes. The comprehensive plan update would [create new zoning categories](#) across the city. In addition to allowing triplexes,

the new rules would allow developers in most residential areas to build four stories high. It would also eliminate off-street parking requirements, which add to the cost of a new project without increasing density.

This update didn't come out of nowhere; city planners update it every decade. According to Minneapolis's long-range planning director, Heather Worthington, this year's update just happens to be more ambitious, seeking to tackle big goals, like climate change, housing choice and affordability, and racial equity.

"We know Minneapolis is facing some of the deepest and most challenging disparities in the nation," Worthington said during a recent episode of the Streets.MN podcast. "Today's zoning is built on those old redlining maps."

In many ways, it's a market-oriented answer to artificial scarcity: More supply meets demand, brings down housing costs, and allows more workers to live close to jobs and other opportunities.

The updated plan would allow for more construction for the future, while Frey's plans to invest \$40 million in programs to help those suffering from the impact of high housing costs would help expand the safety net today. Initiatives like Stable Homes, Stable Schools, which would support homeless children and teens in Minneapolis Public Schools; a fund to help upgrade existing affordable housing; a tripling of the \$6.5 million Affordable Housing Trust Fund; and money for tenant legal advocacy would provide immediate assistance as the changes envisioned by Minneapolis 2040 begin to take shape.





View from an apartment in Minneapolis's North Loop. | Shutterstock

A major change, or just a “meh sandwich”?

While the plan may be a big leap forward compared to what other cities are proposing, many think it doesn't go far enough, saying that it's a “meh sandwich” that lacks the ambition to match the scope of the problem. According to advocates from Neighbors for More Neighbors, a YIMBY group pushing for greater density, watering down the upzoning proposal was a step in the wrong direction.

“The much-discussed fourplex proposal was a small step toward ending exclusionary zoning, but even then was a compromise that only went part way toward ending the historical inequities enshrined in the zoning code,” wrote Matt Lewis, a group volunteer.

“If Minneapolis is serious about achieving its climate goals, then enabling more people to live along transit corridors, near daily destinations, in places where living without a car is a realistic choice, is an obvious first step.”

Others have attacked the plan for its “open the market for more density, and affordability will come” mindset. Greater density will replace starter homes with boutique housing, or will simply give developers more opportunity to build high-cost units without truly adding to the supply of affordable housing, they argue.

At a community forum about the plan, former city planner Tim Keane said the plan is “a radical social engineering experiment without a shred of empirical data to support its shifting goals.”

The balancing act of better zoning

As the plan nears a final vote in early December—members of the city council will debate and suggest final adjustments to the proposed planning update beginning this week—the feeling that its proponents have of being attacked from all sides will likely get worse. Many council members have discussed introducing changes to further increase density, support transit, mitigate climate change, and reduce racial disparities, including adding an inclusionary zoning policy, which would mandate that every multifamily project include a certain percentage of affordable units.

While these changes may bolster the original goals of the plan update, they may further strain support. Those fearing how upzoning will change neighborhood character, the traditional NIMBY argument, will be further alienated.

Environmentalists supportive of density and transit-oriented development are wary changes may alleviate some sprawl, but at the cost of urban parks and green spaces. Local builders have said they would push back against inclusionary zoning, since it may make many planned affordable projects financially impossible. Developer Kelly Doran said the inclusionary zoning proposal would drive up rental costs at his under-construction Expo project by \$100 a month.

Changing the direction of a city is, naturally, a balancing act. Minneapolis’s planning department will not meet all its goals with this overhaul, and will likely create additional issues to settle in the future.

But at least the city, unlike many of its peers, is having a substantive debate about density, affordability, and—especially in the wake of the National Climate Assessment last week—the environment.

“We are heading toward the greatest housing problems for low-income people since the Great Depression,” said Alan Arthur, CEO of nonprofit Minneapolis developer Aeon. “It will cost billions in private and public dollars. We just can’t argue policy tweaks.”

KSTP

From: Basting, Thomas Jr.
Sent: Wednesday, November 7, 2018 2:55 PM
To: heather.worthington@minneapolismn.gov
Cc: Perry, Jack Y. <JPerry@Briggs.com>
Subject: Follow-up re meeting

Heather,

I was a pleasure talking with you yesterday and thank you again for reaching out to hear my perspective on the proposed 2040 plan. As we discussed yesterday, the group Smart Growth Minneapolis has retained my law partner Jack Perry to require Minneapolis evaluate, avoid, and/or mitigate the environmental impairment to resulting from the planned increased density. But before seeking equitable or injunctive relief, the preference would be to work with the City to voluntarily undertake comprehensive environmental review. Such review is not unprecedented. Seattle prepared a final EIS for its mandatory housing affordability plan and, more nearby, the city of Morehead recently completed an AUAR for a planned growth area. I believe that City voluntarily (or involuntarily) undertaking a similar comprehensive environmental review of the 2040 Comprehensive Plan, and any feasible and prudent alternatives, is necessary in light of the expansive and far-reaching building height, density, and land use changes advanced in the proposed Plan.

I understand from our conversation that you view the Plan as now in the hands of the City Council, but to the extent that you are willing to facilitate continued discussions with CPED (or other City office) regarding the City voluntarily undertaking comprehensive environmental review of the proposed 2040 Plan please let me know. I've cc'd Jack Perry on this email so that you have his contact information as well. If it would be helpful to have another meeting, we would welcome the opportunity.

Thanks again for reaching out.

Regards,

Tom Basting



Thomas J. Basting, Jr.
Shareholder
Briggs and Morgan, Professional Association

OFC 612-977-8400 | DIR 612-977-8406 | MBL 612-723-2115
2200 IDS Center, 80 South 8th Street, Minneapolis, MN 55402
Briggs.com

From: Basting, Thomas Jr.

Sent: Thursday, November 15, 2018 4:17 PM

To: jacob.frey@minneapolismn.gov

Cc: Susan.Segal@minneapolismn.gov; heather.worthington@minneapolismn.gov; Perry, Jack Y. <JPerry@Briggs.com>

Subject: 2040 Plan Voluntary Environmental Review

Dear Mayor Frey:

I am writing to follow up on a meeting I had last week on behalf of Smart Growth Minneapolis with Long Range Planning Director Heather Worthington concerning Minneapolis voluntarily undertaking full environmental review (formal EIS or AUAR) prior to adopting its 2040 Comprehensive Plan.

Director Worthington reached out to me after I spoke on this issue at the Planning Commission hearing. I discussed with Ms. Worthington the need for complete and formal environmental review of the 2040 Plan given the scope and scale of land use changes allowed under the proposal. We also discussed advantages to the City of conducting voluntary environmental review in that the City would operate as the RGU by conducting a voluntary EIS or AUAR.

I felt that Ms. Worthington and I had a respectful discussion concerning the environmental impacts and impairment resulting from the proposed plan, and while we did not reach any agreement, she offered to have additional conversations. I would like to take Ms. Worthington up on her offer continue discussions, but given the limited time for acting before the City Council votes on the plan I wanted to offer to include you and the city attorney in discussions as well.

If you are interested in meeting, we can arrange our schedules to make anything next week (excluding the obvious) or the following week work.

Regards,

Tom Basting



Thomas J. Basting, Jr.

Shareholder

Briggs and Morgan, Professional Association

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Briggs.com

From: Basting, Thomas Jr.
Sent: Wednesday, November 28, 2018 11:55 AM
To: jacob.frey@minneapolismn.gov; Susan.Segal@minneapolismn.gov
Cc: Perry, Jack Y. <JPerry@Briggs.com>; Walsh, Nancy <NWalsh@Briggs.com>
Subject: MERA Action: Smart Growth Minneapolis

Dear Mayor Frey:

I'm writing to follow up on my November 15, email concerning the City undertaking voluntary environmental review prior to adopting the 2040 Comprehensive Plan and to confirm our conversation at the citizens' forum last night at Saint Mark's Episcopal Church that Smart Growth Minneapolis will file under MERA to enjoin adoption of the Plan should the City fail to do the right thing and voluntarily undertake a formal EIS or AUAR.

You said to the citizens' group last night that you opposed environmental review of the 2040 Plan because all the studies show that increasing density decreases carbon emissions. But MERA addresses the existence of and correspondingly required mitigation of "likely" material adverse impacts arising from the 2040 Plan, not (as you suggested) whether those impacts outweigh or are lesser than the impacts from City's alternatives to the 2040 Plan, whatever they are. Indeed MERA's effectively required EIS, as is being done by Seattle for its own scaled-down upzoning project, would require City to assess that very issue—i.e., prove or disprove your conclusion.

There is still a window, albeit closing quickly, for the City to get out in front of this, pause adoption of the Plan, and voluntarily undertake formal environmental review of its far-reaching land use plan. Minneapolis can certainly seek an extension from Met Council, as did St. Paul. Minneapolis can, and should, undertake formal environmental review of the Plan, as Seattle did for its much smaller scale Mandatory Affordability Ordinance, and as Morehead did just this year for its much smaller expansion area.

Minneapolis will address the environmental impacts of the 2040 Plan, either voluntarily, or defending a MERA action before a judge. As I said last night, we've known each other for a long time and I do not want you to be surprised by Briggs and Morgan seeking and obtaining a MERA injunction on behalf of Smart Growth Minneapolis. Should City wish to meet to discuss voluntary environmental review prior to Smart Growth Minneapolis seeking a MERA injunction, we would welcome the opportunity.

Sincerely,

Tom Basting



Thomas J. Basting, Jr.
Shareholder
Briggs and Morgan, Professional Association

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Minneapolis, Minnesota 55403

July 20, 2018

To Whom It May Concern:

The Audubon Chapter of Minneapolis (ACM) submits the following comments on policies and topics in the Minneapolis 2040 Comprehensive Plan.

First, a preliminary comment: This draft of the Minneapolis 2040 plan seems at its core to be a barely veiled promotion for virtually unlimited expansion of high-density housing. Such an expansion of high-density building would eliminate bird and other wildlife habitat. Instead of enabling the destruction of green space by increasing density and pavement and pushing buildings to the edge of lot lines, the Plan should prioritize creating green space and emphasize green building, including green roofs, wildlife and pollinator habitat, and setbacks for green boulevards. Preserving and expanding green space and creating connected natural areas and networks of wildlife corridors will not only protect birds, pollinators and other wildlife, but will help minimize the adverse environmental stressors on the public health caused by pollution and rising temperatures due to climate change.

The 2013 *Minneapolis Climate Action Plan* notes that "In Minneapolis, public health impacts of extreme heat or precipitation events and poor air quality days may be exacerbated by the effects of the urban environment, existing exposure to local pollution sources, and lack of access to green space and air conditioning." (p. 5)

Further, the city's stated climate action goals for land use include the following: "Promote and strengthen green infrastructure and natural systems that can build resilience, sequester or reduce emissions, and improve our neighborhoods" and "Promote natural landscape." (pp. 23-24)

High-density housing and commercial buildings must include a complementary design for green space that prioritizes suitable habitat for birds and other wildlife.

I. Policies

Policy 5. Visual Quality of New Development

- Action step e. states, "Require adequate distribution of windows and architectural features in order to create visual interest."

A recent study estimated that between 365 million and 988 million birds are killed annually by building collisions in the United States and that migratory birds are at particular risk. Requiring the use of windows in buildings increases the risk of bird-glass collisions, which occur most often at the first 40–60 feet of a building. Requiring bird-safe glass will reduce the collision risk as well as add to the energy efficiency of buildings. The city should add an action step that amends the zoning code to require that all new construction use bird-safe glass.

Representing National Audubon Society in Greater Minneapolis

Policy 6. Pedestrian-Oriented Building and Site Design

- Action step c. states, “Require windows on buildings to allow clear views into and out of the building.”
- Action step d. states, “Ensure that buildings incorporate design elements that eliminate long stretches of blank, inactive exterior walls through provision of windows”

A recent study estimated that between 365 million and 988 million birds are killed annually by building collisions in the United States and that migratory birds are at particular risk. Requiring the use of windows in buildings, particularly at the pedestrian level, increases the risk of bird-glass collisions, which occur most often at the first 40–60 feet of a building. Requiring bird-safe glass will reduce this risk as well as add to the energy efficiency of buildings. The city should add an action step that amends the zoning code to require that all new construction use bird-safe glass.

Policy 11. Skyways

- Skyways are acknowledged internationally as a building-related hazard for birds because of their transparency. ACM was pleased to consult with the city in developing the bird-safe glazing requirements for new skyways in Minneapolis Code of Ordinances, Title 20 Zoning Code, Chapter 535 Regulations of General Applicability, Article XIII Skyways.

Action step b. states, “Require maximum transparency of skyway walls in order to provide views to the outside that help users orient themselves.”

Add the following language to step b. from the zoning code: “At least eighty-five (85) percent of the glazing area of the exterior sidewalls of a skyway shall meet the bird-safe glazing definition.”

- Add an action step that amends the zoning code to require that all retrofitted skyway glass must meet the skyway bird-safe glazing requirements.

Policy 12. Lighting

- Minnesota is located on the Mississippi Flyway—a key migration flyway for millions of birds and hundreds of species. More than 250 species of birds migrate through the state each spring and fall; many of these migrate at night and can be drawn off course by lighted structures, causing them to be killed or injured in collisions with buildings. A study by the Field Museum in Chicago found that turning off the lights at one downtown high-rise reduced migratory bird deaths by 83 percent.

Action step g. states “Update city zoning code to reflect best available practices related to dark skies and the environmental benefits of strategic lighting management.”

Rewrite step g. as follows: “Update city zoning code to incorporate a “Lights Out” policy requiring building owners, managers and tenants to turn off or dim unnecessary lighting (e.g., exterior decorative lighting, lobby and atrium lighting, interior lights—especially upper floors) from midnight until dawn during spring migration (March 15 to May 31) and fall migration (August 15 to October 31).”

Policy 13. Landscaping

- ACM supports the use of green roofs and trees and plants that are indigenous or proven adaptable to the local climate, as set forth in this policy. To survive, native birds need native plants and the insects that have co-evolved with them, since more than 95 percent of all terrestrial bird species in North America feed insects to their young.

In addition, the habitat provided by native plants can help birds adapt and survive amid a changing climate. More than half of North American bird species are threatened by climate change, and native plants can help increase their resilience by providing food and places to rest and nest.

- Add an action step banning the use of pesticides and herbicides in landscaping.

Policy 53. Quality of Life

- Action step c. states, "Maintain and enhance the many built and natural environmental assets throughout the city to promote and strengthen communities."

Green space, including natural habitat, is a vital environmental asset that must be preserved and expanded in proportion to increased density to ensure the future of birds and other wildlife in the urban environment.

Rewrite step c. as follows: "Maintain and enhance the many built and natural environmental assets throughout the city, including green space and natural habitat, to promote and strengthen communities."

Policy 67. Climate Resilient Communities

- Wildlife is also impacted by climate change. A recent study by National Audubon Society identified 314 species—nearly half of all North American birds—as severely threatened by climate change, meaning they face losing more than 50 percent of their current climatic range by 2080. To combat this loss, Minneapolis must create safe habitat for birds to rest and nest by using fewer pesticides, letting dead trees stand, and using native plants. Creating and preserving a network of connected wildlife corridors and natural areas will allow birds and other wildlife to access resources, shift their ranges, and establish new territories.

The 2013 *Minneapolis Climate Action Plan* notes that "In Minneapolis, public health impacts of extreme heat or precipitation events and poor air quality days may be exacerbated by the effects of the urban environment, existing exposure to local pollution sources, and lack of access to green space and air conditioning." (p. 5) Further, the city's stated climate action goals for land use include the following: "Promote and strengthen green infrastructure and natural systems that can build resilience, sequester or reduce emissions, and improve our neighborhoods" and "Promote natural landscape." (pp. 23-24)

Policy 68. Energy Efficient Buildings

- Action step d. states, “For those projects supported with City financing, encourage sustainable design practices and principles with a focus on robust energy efficiency and building envelope.”

ACM believes that Minneapolis should require, not just encourage, sustainable design in buildings relying on city financing. Bird-safe glass is an important component of sustainable design and must be required in every city-supported building. Bird-safe glass has the added advantage of being energy efficient.

Policy 70. Ecology and Habitat

- ACM supports the range of action steps in this policy and agrees with the plan’s statement that “Conserving Minneapolis’ natural heritage makes the city more livable, resilient and attractive—not only for people—but for migrant bird and wildlife populations in our habitat corridors, for endangered bee pollinators in our parklands, and for native plant communities in our landscapes.”
- ACM strongly encourages the use of native plants in every planting. To survive, native birds need native plants and the insects that have co-evolved with them, since more than 95 percent of all terrestrial bird species in North America feeding insects to their young. In addition, the habitat provided by native plants can help birds adapt and survive amid a changing climate. More than half of North American bird species are threatened by climate change, and native plants can help increase their resilience by providing food and places to rest and nest.

Policy 71. Soil Health

- Action step b. states, “Ensure that site plan review requirements allow for landscaping materials that improve soil conditions and discourage those that do harm.”

Rewrite step b. as follows: “Ensure that site plan review requirements allow for landscaping materials that improve soil conditions and discourage those that do harm, such as non-native plants and pesticides and other harmful chemicals.”

Policy 78. Park Design and Programming

- Action step j. states, “Utilize parks and open spaces places for engaging the community about the place-specific impacts of climate change.”

Rewrite step j. as follows: “Utilize parks and open spaces places for engaging the community about the place-specific impacts of climate change and demonstrate a commitment to mitigating those impacts by converting turf grasses to native grasses and habitat that can support migratory birds, pollinators and other wildlife.”

II. Topics

Public Services and Facilities

The Public Services and Facilities topic states, "In the case that a public building closes altogether or a new facility is built, the City will ensure that the re-use or establishment of that building is consistent with the land use policies of this plan and is informed by public input. The City will also use its own properties as a model for private development, demonstrating the value of environmental sustainability, an engaging public realm, and the use of high quality materials."

- ACM believes that in order to become a model for private development and demonstrate the value of environmental sustainability, Minneapolis should require that its own properties use bird-friendly treatment, including bird-safe glass, and should require appropriate native plants.

Land Use and Built Form

- As noted at the beginning of our comments, the expansion of high-density building proposed in the 2040 Plan will eliminate bird and other wildlife habitat. Instead of enabling the destruction of green space by increasing density and pavement and pushing buildings to the edge of lot lines, the Plan should prioritize creating green space and emphasize green building, including green roofs, wildlife and pollinator habitat, and setbacks for green boulevards. Preserving and expanding green space and creating connected natural areas and networks of wildlife corridors will not only protect birds, pollinators and other wildlife, but will help minimize the adverse environmental stressors on the public health caused by pollution and rising temperatures due to climate change.

The 2013 *Minneapolis Climate Action Plan* notes that "In Minneapolis, public health impacts of extreme heat or precipitation events and poor air quality days may be exacerbated by the effects of the urban environment, existing exposure to local pollution sources, and lack of access to green space and air conditioning." (p. 5) Further, the city's stated climate action goals for land use include the following: "Promote and strengthen green infrastructure and natural systems that can build resilience, sequester or reduce emissions, and improve our neighborhoods" and "Promote natural landscape." (pp. 23-24)

- The proposed building development along sections of the Mississippi River conflicts with the Mississippi River Corridor Critical Area plan and will result in the destruction of critically important natural habitat for migratory birds, pollinators and other wildlife. For example, large sections of land between the Stone Arch Bridge and the 35W Bridge on the West Bank directly adjacent to the river are marked for development of buildings as tall as 20 stories. The Mississippi River is a nationally significant bird migration route and is located in the Mississippi Flyway, one of four major migration pathways across North America. Each day, migratory birds are challenged to find food, water, and habitat for rest and safety from predators and this effort becomes even more important during migration as birds are often moving through unfamiliar terrain. Preservation of habitat along the riverfront is vital to their survival and must be prioritized in the city's 2040 Plan.

Audubon Chapter of Minneapolis
July 20, 2018

Thank you for your consideration,



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Cc: Mayor Jacob Frey
Minneapolis City Council Members
Minneapolis Park and Recreation Board Superintendent Mary Merrill
Minneapolis Park and Recreation Board Commissioners

October 23, 2018

Minneapolis City Council and Planning Commission Members:

Our coalition of bird conservation organizations submits the following comments on the revised Minneapolis 2040 Comprehensive Plan.

The unlimited expansion of housing density encouraged in the 2040 Plan is likely to reduce bird and other wildlife habitat. We believe that the Plan should prioritize creating green space and emphasize green building, including green roofs, wildlife and pollinator habitat, and setbacks for green boulevards. Instead, the current plan enables the destruction of green space by increasing pavement and other impervious surfaces, and pushing buildings to the edge of lot lines. Preserving and expanding green space and creating connected natural areas and wildlife corridor networks not only protects birds, pollinators and other wildlife, but helps minimize the adverse environmental stressors on the public health caused by pollution and climate change.

We also believe that increasing housing density without corresponding due attention to green space, parklands and the needs of wildlife and plants creates an unhealthy environment for all living things. When wildlife habitat is lost, bird tourism is undermined, and people suffer because crops and gardens are compromised for lack of pollinators, garbage and carrion linger for loss of scavengers, and overall environmental health declines in large part because of the loss of birds. Any effort to facilitate development of new housing and commercial spaces needs to be balanced with an equally crucial commitment to sustaining green space, parkland and all opportunities to protect and promote the vitality of all living things.

Minneapolis occupies a crucial place in the Mississippi Flyway/Corridor used by literally millions of birds and dozens of insect and other species. If we protect and provide green space to ensure that migrants have sustenance for their migrations, not only do Minneapolis residents benefit directly from the presence of the remarkable species, but countless communities north and south of us benefit from our care and attention to the needs of these migrants. We owe our residents and our neighbors near and far a plan that honors and promotes the health of all our environments.

In light of these basic commitments, we urge the following amendments to the revised Minneapolis 2040 plan:

I. Policies

Policy 5. Visual Quality of New Development

- **Action step e.** states, "Require adequate distribution of windows and architectural features in order to create visual interest."

Add an action step that amends the zoning code to require that all new construction use bird-safe glass.

A recent study estimated that between 365 million and 988 million birds are killed annually by building collisions in the United States and that migratory birds are at particular risk. Requiring the use of windows in buildings increases the risk of bird-glass collisions, which occur most often at the first 40–60 feet of a building. Requiring bird-safe glass will reduce the collision risk as well as add to the energy efficiency of buildings.

Policy 6. Pedestrian-Oriented Building and Site Design

- **Action step c.** states, “Require windows and window treatments on buildings that allow clear views into and out of the building.” **Action step d.** states, “Ensure that buildings incorporate design elements that eliminate long stretches of blank, inactive exterior walls through provision of windows, multiple entrance doors, green walls, and architectural details.”

Add an action step that amends the zoning code to require that all new construction use bird-safe glass.

A recent study estimated that between 365 million and 988 million birds are killed annually by building collisions in the United States and that migratory birds are at particular risk. Requiring the use of windows in buildings, particularly at the pedestrian level, increases the risk of bird-glass collisions, which occur most often at the first 40–60 feet of a building. Requiring bird-safe glass will reduce this risk as well as add to the energy efficiency of buildings.

Policy 11. Skyways

- **Action step b.** states, “Require transparency of skyway walls in order to provide views to the outside that help users orient themselves.”

Amend step b. as follows: “Require enough transparency of skyway walls to provide views to the outside that help users orient themselves. At least eighty-five (85) percent of the glazing area of the exterior sidewalls of a skyway shall meet the bird-safe glazing definition in Minneapolis Code of Ordinances, Title 20 Zoning Code, Chapter 535 Regulations of General Applicability, Article XIII Skyways.”

Add an action step that amends the zoning code to require that all retrofitted skyway glass must meet the skyway bird-safe glazing requirements.

Skyways are acknowledged internationally as a building-related hazard for birds because of their transparency. Audubon Chapter of Minneapolis consulted with the city in developing the bird-safe glazing requirements for new skyways in Minneapolis Code of Ordinances, Title 20 Zoning Code, Chapter 535 Regulations of General Applicability, Article XIII Skyways. Please reference those code provisions in the 2040 Plan.

Policy 12. Lighting

- **Action step g.** states “Update city regulations to reflect best available practices related to dark skies and the environmental benefits of strategic lighting management.”

Amend step g. as follows: “Update city regulations to incorporate a “Lights Out” policy requiring building owners, managers and tenants to turn off or dim unnecessary lighting (e.g., exterior decorative lighting, lobby and atrium lighting, interior lights—especially upper floors) from midnight until dawn during spring migration (March 15 to May 31) and fall migration (August 15 to October 31).”

Minnesota is located on the Mississippi Flyway—a key migration flyway for millions of birds and hundreds of species. More than 250 species of birds migrate through the state each spring and fall; many of these migrate at night and can be drawn off course by lighted structures, causing them to be killed or injured in collisions with buildings. A study by the Field Museum in Chicago found that turning off the lights at one downtown high-rise reduced migratory bird deaths by 83 percent.

Policy 13. Landscaping

- **Add an action step** banning the use of pesticides and herbicides in landscaping.

We support the use of green roofs and trees and plants that are indigenous or proven adaptable to the local climate, as set forth in this policy. To survive, native birds need native plants and the insects that have co-evolved with them, since more than 95 percent of all terrestrial bird species in North America feed insects to their young.

In addition, the habitat provided by native plants can help birds adapt and survive amid a changing climate. More than half of North American bird species are threatened by climate change, and native plants can help increase their resilience by providing food and places to rest and nest.

Policy 53. Quality of Life

- **Action step c.** states, “Maintain and enhance the many built, historic, arts, and natural environmental assets throughout the city to promote and strengthen communities.”

Amend step c. as follows: “Maintain and enhance the many built, historic, arts, and natural environmental assets throughout the city, including green space and natural habitat, to promote and strengthen communities.”

Green space, including natural habitat, is a vital environmental asset that must be preserved and expanded in proportion to increased density to ensure the future of birds and other wildlife in the urban environment.

Policy 67. Climate Resilient Communities

- **Action step g.** states, “Develop guidance that encourages climate-sensitive design for residential and commercial buildings, parking lots, and open spaces and parks.”

Amend step g. as follows: “Develop guidance that calls for climate-sensitive design for residential and commercial buildings, parking lots, and open spaces and parks and promotes and strengthens green infrastructure and natural systems and landscapes.”

Policy 68. Energy Efficient and Sustainable Buildings

- **Action step d.** states, “Encourage sustainable design practices and principles for projects supported with City financing, with a focus on robust energy efficiency and building envelope. For those projects supported with City financing, encourage sustainable design practices and principles with a focus on robust energy efficiency and building envelope.”

Amend step d. as follows: “Require sustainable design practices and principles for projects supported with City financing, with a focus on robust energy efficiency and building envelope and environmentally friendly building treatments including bird-safe glass.”

Minneapolis should require, not just encourage, sustainable design in buildings relying on city financing. Bird-safe glass is an important component of sustainable design and must be required in every city-supported building. Bird-safe glass has the added advantage of being energy efficient.

Policy 70. Ecology and Habitat

- **Action step i.** states, “Encourage and require use of bird-safe glass and other building materials and features that are not detrimental to natural ecologies where appropriate.”

Amend step i. as follows: “Require use of bird-safe glass and other bird-friendly building materials and features that are not detrimental to natural ecologies.”

- We strongly encourage the use of native plants in every planting. To survive, native birds need native plants and the insects that have co-evolved with them, since more than 95 percent of all terrestrial bird species in North America feeding insects to their young. In addition, the habitat provided by native plants can help birds adapt and survive amid a changing climate. More than half of North American bird species are threatened by climate change, and native plants can help increase their resilience by providing food and places to rest and nest.

Policy 71. Soil Health

- **Action step b.** states, “Ensure that site plan review requirements allow for landscaping materials that improve soil conditions, including amending soils in previously compacted areas, and discourage those that do harm.”

Amend step b. as follows: “Ensure that site plan review requirements include landscaping materials that improve soil conditions, including amending soils in previously compacted areas, and discourage those that do harm, such as non-native plants and pesticides and other harmful chemicals and features.”

Policy 78. Park Design and Programming

- **Action step j.** states, “Utilize parks and open spaces places for engaging the community about the place-specific impacts of climate change.”

Amend step j. as follows: “Utilize parks and open spaces places for engaging the community about the place-specific impacts of climate change and demonstrate a commitment to mitigating those impacts by minimizing new turf areas and converting turf grasses to native grasses and habitat that can support migratory birds, pollinators and other wildlife.”

II. Topics

Public Services and Facilities

- The Public Services and Facilities topic states, “The City will also use its own properties as a model for private development, demonstrating the value of environmental sustainability, an engaging public realm, and the use of high quality materials.”
- Amend this statement as follows: “The City will also use its own properties as a model for private development, demonstrating the value of environmental sustainability, an engaging public realm, and the use of high quality materials and environmentally friendly features such as green space for wildlife protection.”

We believe that in order to become a model for private development and demonstrate the value of environmental sustainability, Minneapolis must require that its own properties reflect the importance of trees and urban wildlife and use methods to protect habitat including bird-safe glass, and native trees and vegetation.

Critical Area Plan

- The Mississippi River Corridor Critical Area Plan includes the following Implementation Action: “Update the Zoning Ordinance, including the Shoreland and Critical Area Overlay Districts, to reflect goals and policies of this plan as well as any relevant requirements of federal and state legislation.”

The Minneapolis Shoreland Overlay Ordinance, which limits the height of buildings within 1,000 feet of city shoreland to 35 feet, must be preserved. The 2040 Plan must be revised so that parcels are protected from inappropriate development in the Mississippi Flyway and the Chain of Lakes Important Bird Area.

The proposed building development along sections of the Mississippi will result in the destruction of critically important natural habitat for migratory birds, pollinators and other wildlife. The Mississippi River is a nationally significant bird migration route and is located in the Mississippi Flyway, one of four major migration pathways across North America. Each day, migratory birds are challenged to find food, water, and habitat for rest and safety from predators and this effort becomes even more important during migration as birds are often moving through unfamiliar terrain. Preservation of habitat along the riverfront is vital to their survival and must be prioritized in the city’s 2040 Plan.

Thank you for your consideration,

Keith Olstad, President, Audubon Chapter of Minneapolis

Stephen Greenfield, Board of Directors, Friends of Roberts Bird Sanctuary

Wendy Haan, Co-founder, Minnesota Citizens for the Protection of Migratory Birds

Ann Laughlin, 4804 Dowling Street, with Audubon Chapter of Minneapolis.

I oppose the 2040 Plan for three reasons. First, it doesn't protect green space. Instead of emphasizing green building and wildlife and pollinator habitat, it destroys natural areas and reduces water quality by increasing pavement and other hard surfaces, and pushing buildings to the edge of lot lines.

Second, the proposed development along the Mississippi River and lakes will destroy critically-important habitat for migratory birds, pollinators, and other wildlife. The Plan eliminates the Shoreland Overlay District (SOD) Ordinance, which limits the height of buildings within 1,000 feet of city shoreland to 35 feet. Please revise the Plan to *explicitly* acknowledge the application of the shoreland overlay ordinance, so that land is protected from inappropriate development in the Mississippi Flyway and the Chain of Lakes Important Bird Area.

Third, after the Planning Commission rubber stamped the plan last month, Commissioner Nick Magrino commented on Twitter, "We've even got the bird stuff. It's in there." The "bird stuff" he refers to is in Policy 70, Ecology and Habitat, action step i., which reads:

"Encourage and require use of bird-safe glass and other building materials and features that are not detrimental to natural ecologies where appropriate."

This is gobbledygook. What does it even mean? Please amend this step to read:

"Require the use of bird-safe glass and other building materials and features that protect wildlife and enhance natural ecologies." And then please pass an ordinance that requires bird-safe glass in all new construction in Minneapolis. That would be a start toward doing the "bird stuff."

Finally, in order to adequately consider all the effects of the Plan, the City must prepare an environmental assessment of the Plan before moving forward.

Thank you.

November 27, 2018 exchange

Jeffrey Niswanger: Are you in support of an environmental impact plan?

Mayor Jacob Frey: So the environmental piece is one area where we do disagree. The statistics — this is not my opinion at all — the statistics are exceedingly clear. There have been a ton of different studies on this and — I'm not arguing that increased density would be universally loved or accepted or liked — but increased density does lead to a substantially decreased carbon footprint. It's not my opinion; it is factually proven over and over and over again. In fact, there's nobody that's arguing that.

Keith Williams: What about water quality?

Frey: Water quality . . . actually it's the same piece as well with water quality.

Williams: Yeah.

Frey: I don't know all the specifics on water quality as much as I do carbon footprint. But density generally is an environmental tool. Now, again, does that mean it enhances livability, which is more subjective, and many people patently disagree with? No, it doesn't. Does that mean that it will improve your day-to-day lives for you as a person? I cannot speak to that. But in terms of environmentalism, it's pretty . . . it's cut and dry.

Katharine Brown: Have you done this research yourself? Have you seen this? Because this couldn't be farther from the truth.

Frey: No, I have not done the research myself. I read the reports.

Brown: I think you should.

Frey: I mean, the research has been conducted by experts; I'm not one.

Brown: It doesn't take an expert to know this is gonna deeply affect and hurt the environment in the City of Minneapolis. You can be a leader and you can try and save this and be a hero, or you're gonna destroy it. And I can assure you that if you don't stand for us and be a leader, you will not be mayor again. No one's gonna vote for you sir.